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THE INSANITY OF WILLIAM COWPER.

IN the entire annals of mental disease there is no case so widely known, or which has excited so deep an interest as the insanity of COWPER. Nor can we wonder at this. As a Poet he is known to all who speak the English tongue. His delightful letters have made us perfectly familiar with the man. It is impossible to read his story or his writings, without emotions of admiration, of pity and love.

We propose to give briefly, but connectedly, the history of his mental derangement.

Of hereditary taint in his case we have no evidence. His infancy was delicate in no common degree, and he very early manifested a morbid tendency to diffidence and melancholy. When only six years old, he lost that tender mother, whose praise will live forever in his grateful verse. After this he was sent away to school, and for two years his tender spirit was subjected to the tyrannous treatment of older boys, under that system which was so long the disgrace of English schools. For a boy of his temperament, the regimen was peculiarly unfavorable. He was afterwards placed at Westminster School, where he seems to have been happy enough. It was at this period that he took up for a while with the strange notion that he was immortal. "Surveying my activity and strength, and observing the evenness of my pulse, I began to entertain, with no small complacency, a notion, that perhaps I might never die." Such was his own statement long afterwards. But the strange notion did not last long. "I was soon after struck with a lowness of spirits, uncommon at that age, and had frequent intimations of a consumptive habit."

At the age of 18, he left Westminster, for the study of the law. Three years afterward he took chambers in the Temple. Soon after he began thus to live alone, the malady appeared which afterwards darkened so much of his life. In his own sad memoir he thus describes it. "I was struck, not long after my settlement in the Temple, with such a dejection of spirits, as none but they who have felt the same can have the least conception of. Day and night I was upon the rack, laying down in horror, and rising up in despair." For nearly a year he was in this condition. Change of scene was recommended. He went with some friends to Southampton, and then it was, he tells us, "as if another sun had been kindled that instant in the heavens, on purpose to dispel sorrow and vexation of spirit; I felt the weight of all my sorrow taken off; my heart became light and joyful in a moment; I could have wept with transport had I been alone." However the sufferer himself might afterwards interpret that long period of gloom, and that instantaneous restoration of light and joy—it seems impossible for us to doubt that the depression and the relief were alike due to causes and conditions of a physical nature.

For several years after this recovery his life appears to have been easy, and far from unhappy. He amused himself with literary pursuits. He associated with men of wit, and learning, and fame. In the elegant and friendly circle of his own family connections, the social requirements of his affectionate nature were fully met. To one of his cousins—an accomplished and elegant woman—he became deeply attached. The affection was mutual,—but the father refused consent. There can be no doubt, that the disappointment was a great one to him; but there is no evidence, as some have asserted, that his grief on this account assumed a morbid form, or had any connection with his subsequent attacks of melancholy. Southey goes farther, and asserts that "melancholy madness, which in woman so often originates in love, or takes its type from it, is seldom found to proceed from that passion, or to assume its character in man."

We are told that at this time he was fond of moving about. But this seems to have been "the restlessness of a highly sensitive nature, rather than the activity of a healthy one." He had a physical restlessness, which, till he was more than thirty years old, made it almost essential to his comfort to be perpetually in motion."

As he did no business, he had no means of support beyond the small patrimony left him at his father's death. This he had been gradually

using up. It could not last a great deal longer. That the prospect of approaching poverty began seriously to affect his spirits, is more than probable. It so happened that the clerkship of the Journals of the House of Lords was in the gift of Major Cowper, as were also the joint offices of reading clerk, and clerk of the committees. All of them became vacant about the same time, and Major C. offered the two most valuable places to his kinsman. For him it was a splendid offer, and he accepted it at once, without reflecting on his inability to execute a business of so public a nature. But he soon repented, and after a week of misery wrote to his friend, begging that he might resign the places given him, and take, instead, the less lucrative post. The change was made, but it did not bring the relief which he expected. The clerkship of the journals, which had seemed so easy and so desirable, now became an awful terror to his mind. He was bid to expect an examination at the bar of the House, touching his sufficiency. To his sensitive nature the idea of such an ordeal was appalling. Still he made an effort to qualify himself, and for many months went daily to the office, in order to learn its routine. It was a vain attempt. His mind was not in a condition to seek or to receive knowledge. He was distracted with a perpetual fear that he was about to disgrace himself, and injure his benefactor. His mind was the prey of horrible thoughts. Conscious that something about him must be wrong, he applied to the celebrated Dr. Heberden. He was put upon a course of medicine. He made some efforts of a devotional kind. Still he found no relief. "I now," he says, "began to look upon madness as the only chance remaining. I had a strong foreboding that so it would fare with me, and I wished for it earnestly, and looked forward to it with impatient expectation!" "Such forebodings," says one of his biographers, "were indications of the actual disease. The prior and the subsequent manifestations of the disorder prove that it was inherent in his constitution." Of the way in which it was first openly developed, we have his own interesting account. In that narrative, written when he was supposed to be perfectly sane, he evidently had no just idea of the nature of his disorder, or of the time when his mind became incapable of rational and responsible action. He ascribes to demoniac agency all his despairing thoughts and suicidal purposes. The day for his appearance at the bar of the House of Lords was drawing nigh. "Now came," says he, "the grand temptation; the point to which Satan had all the while been driving me; the dark and hellish purpose of self-murder. I grew

more sullen and reserved, fled from all society, even from my most intimate friends, and shut myself up in my chambers. Being reconciled to the apprehension of madness, I began to be reconciled to the apprehension of death." He gives a graphic account of the various attempts which he made by laudanum, by drowning, by a knife, and by hanging, to put an end to his life. By one means or another he was baffled in them all,—though in one instance he seems to have come very near the accomplishment of his fatal design. After this failure, he became, he says, afraid of death, and deeply convinced of his guilt.

A few days after this, his madness suddenly assumed a shape in which it was manifest to all. He thus describes the access. "While I traversed the apartment in the most horrid dismay of soul, * * a strange and horrible darkness fell upon me. If it were possible that a heavy blow could light on the brain, without touching the skull, such was the sensation I felt. I clapped my hand to my forehead, and cried aloud through the pain it gave me. At every stroke my thoughts and expressions became more wild and indistinct; all that remained clear was the sense of sin, and the expectation of punishment. These kept undisturbed possession all through my illness, without interruption or abatement."

He was now sent to St. Albans—about twenty miles from London—and placed under the care of Dr. Cotton,* who kept what would now be called a private asylum for the insane. At that period the treatment of this class of sufferers was often most injudicious and injurious. It was fortunate indeed for Cowper that he was placed with a man so

* NATHANIEL COTTON, born about 1707, after studying at Leyden, under the far-famed Boerhaave, returned to England, to engage in general practice. Just then a Dr. Crawley, who had a private establishment at Dunstable for the treatment of insane patients, retired from his labors, and resigned his place to Dr. Cotton. He had already given much attention to the varieties of mental disease. To knowledge and skill he added a kind heart, and the most winning manners. From Dunstable he soon removed to St. Albans. His success was great—his fame spread widely—and a great number of persons were entrusted to his care. His asylum was called "The College." In this calm retreat, and thus beneficially employed, he spent the remainder of a long life. He also made himself known as an author. In 1749, he published "Observations on a particular kind of scarlet fever that lately prevailed in and about St. Albans." His "Visions in Verse," appeared not long after. These have been often republished, and have found a place in some of the collections of British Poets. They breathe in every line a spirit of benevolence and piety. Among his distinguished correspondents, were Doctors Young and Doddridge. To the accident, which made Cowper his patient, more than to any thing else, he owes probably the preservation of his fame. It is to be regretted that he left no account of his system—if system he had—in the treatment of the insane.

skillful and so kind as Dr. Cotton. When he had been about five months at St. Albans, he began to seem more cheerful. Three months later his brother John, who was a Fellow at Cambridge, came to see him. The visit was beneficial to the sufferer. His company and his cheering conversation "served" says William, "to put to flight a thousand deliriums and delusions, which I still labored under, and the next morning I found myself a new creature." Soon afterwards he happened to open a Bible, when his eye fell on the 25th verse of the third chapter of Romans. Truly affecting is his warm-hearted account of what followed. "Immediately I received strength to believe, and the full beams of the Sun of Righteousness shone upon me. I saw the sufficiency of the atonement he had made, my pardon sealed in his blood, and all the fullness and completeness of his justification. In a moment I believed, and received the gospel. * * Unless the Almighty arm had been under me, I think I should have died with gratitude and joy." For such a deliverance from so long and so deep a despair, well might his heart flow out in thankfulness and praise.

In Dr. Cotton, at this important juncture, he found more than a physician. "I was not only treated by him with the greatest tenderness while I was ill, and attended with the utmost diligence, but when my reason was restored to me, and I had so much need of a religious friend to converse with, to whom I could open my mind on the subject without reserve, I could hardly have found a fitter person for the purpose."

He remained at St. Albans a year and a half. As he could not bear the thought of returning to London, a home was found for him at Huntingdon. To this damp spot, among the fens of the stagnant Ouse, he retired, taking with him the servant who had been his faithful attendant at St. Albans. Here he soon became a boarder in the family of the Unwins. During the two years of his abode in Huntingdon he seems to have enjoyed uninterrupted happiness. The sudden death of Mr. Unwin, in the summer of 1767, broke up the establishment. It became necessary to find another residence. About that time the family became acquainted with the Rev. John Newton, who had been a slave trader, but was then the pious curate of Olney. Mr. Newton found a house for them near the vicarage which he occupied. To this homely village of poor lace-weavers, Cowper and Mrs. Unwin removed, influenced mainly by their desire to be under the pastoral care of Mr. Newton. "A sincerer friend," says Southey, "Cowper could not have found. He might have found a more discreet one."

We think the biographer is right. It was not, it could not be well for a man of Cowper's inborn and invincible shyness and "trembling sensibilities," to be put upon such labor as Mr. Newton at once marked out for him and worked him up to. In that large and needy parish he was employed in almost constant attendance on the sick, the afflicted, and the dying. Nor was this the worst; Mr. Newton had prayer-meetings in his parish, and Cowper was required to take an active part at the meetings. He acknowledged to his friend Greethead that hours of mental agitation always preceded the meetings in which he was expected to take the lead. Of the danger to which he was thus subjecting his friend, Mr. Newton, whose nerves were of an iron temper, seems to have been wholly unconscious. His position, in other respects, was not favorable for one of his peculiar temperament. In that rude village, Mrs. Unwin, Mr. and Mrs. Newton were the only persons with whom he could associate. He no longer corresponded with intelligent and pleasant friends. Walking, which had become an important habit of his life, could hardly be enjoyed at Olney, so soft and muddy were its roads for two-thirds of the year. There were few books within his reach, and his narrow means would not allow him to purchase such a luxury.

In a little more than two years after he settled in Olney, he lost, by death, his brother John. He was with this dear relative during his last illness, and wrote an account of it, which was not published until after the poet's death, more than thirty years later. That account, and letters written at the time, show how deeply he was interested in this brother, and especially in the change on religious subjects that took place in his views and feelings just before he died. But this event, however consolatory in some of its aspects, appears to have exerted an unfavorable influence on the mind of the survivor. His melancholy tendencies increased. Mr. Newton, perhaps in part as a remedy, urged him to compose hymns; hence the Olney collection—the joint work of the two friends—a collection from which the hymn books of our day still derive some of their choicest treasures. Whether his clerical friend was judicious in the kind of employment thus furnished is a point on which the biographers differ. His increasing gloom at length deepened into decided insanity. This became manifest to all, in January, 1773. For some time he refused to enter Mr. Newton's house; then, having been persuaded to go there for a single night, he could not be induced to leave it. With our light the proper course seems very

clear. He should have been removed at once to St. Albans. So far from this, it was five months after the attack before Mr. Newton visited Dr. Cotton to ask his advice. Dr. Cotton advised that he should be bled, and that the apothecary of Olney should transmit to him an accurate account of the state of the patient's blood, and such other observations as he could make. This was done; and Dr. Cotton, on the strength of Mr. Newton's description and the apothecary's observations, prescribed certain medicines. We are not told what they were. After he had been taking these for twelve days, Mr. Newton says of them, "They agree well with him. He eats better and sleeps no worse." A little later he writes, "The medicine evidently agrees with him. He says but little, but goes on pruning our trees, &c." Three weeks later he says, "Dr. Cotton's medicine has greatly strengthened his body, but the repeated use seemed at length to have an inconvenient effect upon his spirits. He said they made him worse, and for several days when the hour of taking them returned, it put him in an agony. Upon his urgent and earnest entreaties he has left them off for a season, and has been better since—I mean more quiet and composed." What the medicines were does not appear. Mr. Newton soon after says, "I believe the medicines he took, though they seemed to agree with his health, rather inflamed his complaint."

About this time his malady re-assumed its suicidal type. For several months his condition required constant watchfulness on the part of his friends. Mr. Newton, who appears to have looked upon insanity as a sort of demoniacal possession, could find in the fatal delusion of his friend, a new proof of his religious and submissive spirit. "It was," says he, "solely owing to the power the enemy had of impressing upon his disturbed imagination that it was the will of God he should, after the example of Abraham, perform an expiatory act of obedience, and offer not a son, but himself." "This," says Southey, "was the peculiar impression that fastened upon him at that time, and from which he never seems to have been perfectly relieved, even in his longest and best intervals. He believed that when the will of Heaven was made known to him, power to accomplish the act of obedience had at the same time been given; but having failed to use it, he had been sentenced to a state of desertion and perpetual misery, of a kind peculiar to himself. He had sunk into a state of utter hopelessness—'an unalterable persuasion,' says Mr. Greathed, 'that the Lord, after having renewed him in holiness, had doomed him to everlasting per-

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dition.'" Though firmly convinced of the doctrine of perseverance as a general truth, he supposed himself to be the only person who had ever believed with the heart unto righteousness, and yet was excluded from salvation. Believing, under this view of the case, that for him to implore mercy would be opposing the determinate counsel of God, he, with a singular and sad consistency, gave up attendance on public and domestic worship, and desisted from every attempt at private prayer. A singular instance of the extent to which he carried this feeling, was related to a friend of ours by the Rev. Mr. Bull, of Newport Pagnel. The father of Mr. Bull was a friend of Cowper, used often to visit him, and sometimes took with him his son, then a mere lad. Mr. Mr. Bull well remembered that while his father asked a blessing at table, Cowper signified his non-concurrence by a low whistle.

In May, 1774, we find him still at Mr. Newton's, and resolved not to leave. "His health," says Mr. N. "is better; he works almost incessantly in the garden, and while employed is tolerably easy; but as soon as he leaves off, he is instantly swallowed up by the most gloomy apprehensions; though in anything that does not concern his own peace, he is as sensible, and discovers as quick a judgment as ever." A fortnight later, as he was feeding the chickens, some little incident called forth a smile—the first which had been seen upon his face for more than sixteen months. About the same time he returned willingly to his own house. His power of attending to other objects than his own hopeless state, gradually returned. Though the fatal impression was still on his mind, it began in some degree to recover its natural tone. He found pleasure neither in company nor books, "but he continued to employ himself in gardening; and understanding his own case well enough to perceive that anything which should engage his attention without fatiguing it must be salutary, he amused himself with some leverets." For twelve years these little creatures enjoyed his tender care, and helped to solace many a weary hour. "He immortalized them in Latin and in English, in verse and in prose. They have been represented in prints. They have been cut upon seals." His account of them was such an account as only a person of exquisite genius, sensibility, and observation, could have given. But who is not familiar with the history, the character, the habits, of Puss, Tiny, and Bess?

"I kept him for his humor's sake,

For he could oft beguile

My heart of thoughts that made it ache,

And force me to a smile."

Of his condition during this second attack of his malady, Cowper several years afterwards gave the following interesting account to his cousin, Lady Hesketh. "Know then, that in the year 1773, the same scene that was acted at St. Albans, opened upon me again at Olney, only covered with a still deeper shade of melancholy, and ordained to be of much longer duration. I was suddenly reduced from my wonted rate of understanding to an almost childish imbecility. I did not, indeed, lose my senses, but I lost the power to exercise them. I could return a rational answer, even to a difficult question; but a question was necessary, or I never spoke at all. This state of mind was accompanied, as I suppose it to be in most instances of the kind, with misapprehensions of things and persons, that made me a very untractable patient. I believed that every body hated me, and that Mrs. Unwin hated me most of all;—was convinced that all my food was poisoned, together with ten thousand other megrims of the same stamp. Dr. Cotton was consulted. He replied that he could do no more for me than might be done at Olney, but recommended particular vigilance lest I should attempt my life—a caution for which there was the greatest occasion. At the same time that I was convinced of Mrs. Unwin's aversion to me, I could endure no other companion. The whole management of me consequently devolved upon her, and a terrible task she had."

About two years after his return to his own house he began again to correspond with some of his old friends. In this way we learn that his love of literature had revived. His never-failing friend, Hill, occasionally sent him books, which he read with avidity and keen discrimination. In 1779, Mr. Newton, despairing of success among the people of Olney, a large majority of whom appear to have been irreclaimably ignorant and perverse, removed to London. From a letter to his friend Thornton written shortly before he left, it seems that Cowper's derangement was not the only case in his parish. "I believe," he writes, "that my name is up about the country for preaching the people mad: for whether it is owing to the sedentary life the women live here, poring over their pillows for ten or twelve hours every day, and breathing confined air in their crowded little rooms, or whatever may be the immediate cause, I suppose we have near a dozen, in different degrees, disordered in their heads, and most of them, I believe, truly gracious people." He closes with saying, "I trust there is nothing in my preaching that tends to cast those down who ought to be comforted." Cowper must have sorely missed this intelligent, constant, and devoted friend. And

yet in his peculiar condition it was perhaps well for him that the separation took place. Mr. Newton was a good reasoner,—but did not know how to reason with an insane man. Nay, more, had he remained in Olney, it may be doubted whether the *poet* would ever have been developed in Cowper. From what afterwards occurred we know that the good vicar would never have encouraged those literary efforts which furnished to this poor sufferer years of tranquilizing employment,—and which placed his name in the foremost rank of those who have pleased, instructed, and blessed the world.

About this time we find him getting up a small green-house and pinery, which he glazed with his own hands. For a while also he amused himself with drawing. Occasionally he wrote verses. The report of an adjudged case—in which Nose and Eyes contend about the spectacles—a piece which has been familiar to every schoolboy for the last seventy years, was written at this time. Mrs. Unwin perceiving that this exercise was beneficial to him, urged him to undertake some larger and more important work. She even suggested a topic. He took her advice. In the course of four months he wrote as many short poems. These, under the titles of Truth, Table Talk, Expostulation, and the Progress of Error, with several smaller pieces, were published in the autumn of 1781. Thus, at the ripe age of fifty, this melancholy and most interesting recluse made his first appearance before the world. The reception of his book was sufficiently favorable to encourage his labors, and a second volume was soon under way. Although praise from the wise and good was far from being unwelcome to him, he thus explains to Mr. Newton his primary object in these efforts. “At this season of the year, and in this gloomy climate, it is no easy matter for the owner of a mind like mine, to divert it from sad subjects, and fix it upon such as may administer to its amusement. Poetry, above all things, is useful to me in this respect. While I am held in pursuit of pretty images, or a pretty way of expressing them, I forget every thing that is irksome, and, like a boy that plays truant, determine to avail myself of the present opportunity to be amused, and to put by the disagreeable recollection that I must, after all, go home and be whipped again.”

In the summer of this year he accidentally made a new acquaintance, too influential in its results to be omitted in our narrative. The widow of an English baronet, who had been living for some time in France, came to visit a sister then in Olney. Lady Austen, as Cowper

described her at that time to Mr. Newton, was "a lively, agreeable woman, who has seen much of the world, and accounts it a great sim-
pleton—as it is. She laughs, and makes laugh; and keeps up a con-
versation without seeming to labor at it." To Mr. Unwin, he wrote,
"A person who has seen much of the world, and understands it well,
has high spirits, a lively fancy, and great readiness of conversation,
introduces a sprightliness into such a scene as this, which, if it was
peaceful before, is not the worse for being a little enlivened." It was
indeed, just what that scene required, and while this bright spirit con-
tinued to cheer it, the effect on Cowper was evidently happy. She
knew how to interest and amuse him. She gave direction to his
thoughts, and suggested topics for his pen. "Had it not been for Mrs.
Unwin," says Southey, "he would probably never have appeared in his
own person as an author; had it not been for Lady Austen, he would
never have been a popular one." "For a while, Lady Austen's con-
versation had as happy an effect upon the melancholy spirit of Cowper
as the harp of David upon Saul." Whenever the cloud seemed to be
coming over him, her sprightly powers were exerted to dispel it." One
afternoon, finding him more than usually depressed, she told him the
story of John Gilpin. It was a tale which she had heard in her child-
hood, and it amused him highly. The next morning he informed her
that for thinking and laughing at the story he had been unable to sleep,
and that he had turned it into a ballad. That ballad soon became
famous. Who has not read it? Who has not laughed over it? Allu-
ding to it in one of his letters, sometime afterwards, he said, "If I trifle,
and merely trifle, it is because I am reduced to it by necessity; a mel-
ancholy that nothing else so effectually disperses, engages me some-
times in the arduous task of being merry by force. And strange as it
may seem, the most ludicrous lines I ever wrote, have been written in
the saddest mood, and but for that saddest mood, perhaps, had never
been written at all." The experience of Cowper in this regard does
not stand alone, as the history of literature abundantly shows.

Lady Austen was fond of blank verse, and often urged Cowper to try
his hand at it. At length he promised compliance if she would give him
a theme. "That," she replied, "you can never want. You can write
upon any; write upon this sofa." So began 'The Task,' a "work which
made him the most popular poet of his age; and raised him to a rank
in English poetry from which no revolution of taste can detrude him."
Thanks to the sprightly and accomplished woman, who gave a moment-

ary brightness to that sad and lonely home ! Thanks, especially to her, who inspired a song that has delighted and instructed millions ! Unfortunately this auspicious influence was not of long duration. Lady Austen was, perhaps, somewhat exacting, and Mrs. Unwin had no disposition to surrender any of her undoubted rights. Between his new friend, however charming, and her whose devotion had so long been tested, the poet could not for a moment hesitate. The task which she had set, was not yet finished, when Lady Austen left the scene, in which she appears no more.

The Rev. Thomas Scott, whose Commentary on the Bible has made his name famous both in England and America, succeeded Mr. Newton in the vicarage of Olney. But as he was far from being the genial and lovable man his predecessor was, and as Cowper was no longer an attendant at church, the poet seems to have had but little intercourse with the vicar. There was, however, at that time, in the adjoining town of Newport Pagnel, a dissenting clergyman—the Rev. William Bull. Mr. Newton when leaving Olney, had, with thoughtful kindness, introduced Mr. Bull to his afflicted friend. Twice a month this good-hearted man made it a point of duty to visit Cowper. They soon learned to respect and to value each other. In a letter from the poet to his cousin, Lady Hesketh, written soon after Lady Austen's departure, he says, "And now, except the Bull that I spoke of, we have seldom any company at all." This man after Cowper's own heart the latter sometimes addressed in his epistles as, *Carissime Taurorum*. Writing to William Unwin, he thus beautifully depicts him : "A dissenter, but a liberal one ; a man of letters and of genius ; a master of a fine imagination, or rather not master of it—an imagination which, when he finds himself in the company he loves, and can confide in, runs away with him into such fields of speculation as amuse and enliven every other imagination that has the happiness to be of the party. At other times he has a tender and delicate sort of melancholy in his disposition, not less agreeable in its way. No men are better qualified for companions in such a world as this, than men of such a temperament. Every scene of life has two sides—a dark and a bright one ; and the mind that has an equal mixture of melancholy and vivacity, is best of all qualified for the contemplation of either. He can be lively without levity, and pensive without dejection. Such a man is Mr. Bull. But—he smokes tobacco ! Nothing is perfect !"

To Mr. Bull we owe Cowper's translations from the French of

Madame Guion. He was an admirer of that amiable pietist, and no doubt felt that he rendered the poet a service when he gave him something to do. That Cowper could treat in verse subjects which he dreaded to attempt in prose, he thus explained to Mr. Newton: "There is a difference. The search after poetical expression, the rhyme, and the numbers, are all affairs of some difficulty. They arrive, indeed, but are not to be attained without study, and engross perhaps a larger share of the attention than the subject itself. Persons fond of music will sometimes find pleasure in the tune, when the words afford them none." It seems also to have been an effect of his disease, that he could often translate the language of others, when he could not write his own. In this instance he could transfer to beautiful English the devotional ardors of the French mystic, when it would have seemed to him an impious act to write a single stanza of the sort in his own proper person. When, several years later, Mr. Bull asked him to compose a hymn for some occasion, he declined, and gave his reasons. He was willing, however, to alter and adapt one of the translations of Madame Guion, if that would do. "I have no objection," he added, "to giving the graces of the foreigner an English dress, but insuperable ones to all false pretences, and affected exhibitions of what I do not feel."

"The Task," and its *avant courier*, "John Gilpin," had now made their author famous. Modest, conscientious, despairing as he was, he was far from being indifferent to the voice of praise. But fame and money, though welcome, were not so welcome or so useful to him as the old friendships which were now renewed, and the new ones which were formed. Allusion has already been made to the object of his early love—Theodora Jane Cowper. Her sister, the wife of Sir Thomas Hesketh, was, in those days, his steadfast friend. After he left London she corresponded with him awhile. But for many years previous to the period we write of, all intercourse between these cousins had ceased. From a long absence abroad, Lady Hesketh had just returned, a widow, to find her once beloved kinsman—the poor, self-banished, half-crazy recluse of Olney, suddenly become the most popular poet of the day. She wrote to him, and received an immediate and most affectionate reply. In a second letter she offered him pecuniary aid, which was gratefully accepted. From this time he failed not to enjoy the cordial and efficient kindness of Lady Hesketh, so long as he was capable of enjoying any thing.

Convinced as he had now become that nothing was so beneficial to him as constant literary employment, and that verse-writing was the best form of it for him, he had hardly dispatched his second volume to the printer when he began to make a translation of Homer. Forty lines a day was his set task, from which he never excused himself when it was possible to perform it. In the evening he transcribed what he had written in the morning. "Between both," said he, "my morning and evening are most part completely engaged." Unwilling to raise expectations which he might disappoint, he made no general announcement of his new undertaking until it was already far advanced. Writing to his friend Newton, Dec., 1785, he gave the following account of the manner in which he had, by seeming accident, been led to engage in a labor so arduous. "Employment, and with the pen, is, through habit, become essential to my well-being; and to produce always original poems, especially of considerable length, is not so easy. For some weeks after I had finished 'The Task,' I was, through necessity, idle, and suffered not a little in my spirits for being so. One day, being in such distress of mind as was hardly supportable, I took up the 'Iliad;' and merely to divert attention, and with no more preconception of what I was then entering upon, than I have at this moment of what I shall be doing this day twenty years hence, translated the first twelve lines of it. The same necessity pressing me again, I had recourse to the same expedient, and translated more. Every day bringing its occasion for employment with it, every day consequently added something to the work, till at last I began to reflect thus:—The 'Iliad' and the 'Odyssey' together consist of about forty thousand verses. To translate these forty thousand verses will furnish me with occupation for a considerable time."

To the same friend, who had evidently expressed fears lest Cowper, by laboring on a profane author, or by associating with profane men, should suffer in his spiritual interests, he wrote in May, 1786. "Though others" said he, "have suffered desertion, yet few, I believe, for so long a time, and perhaps none a desertion accompanied by such experiences. But they have this belonging to them; that as they are not fit for recital, being made up merely of infernal ingredients, so neither are they susceptible of it; for I know no language in which they could be expressed. They are as truly things which it is not possible for man to utter, as those were which Paul heard and saw in the third heaven. If the ladder of Christian experience reaches, as I suppose

it does, to the very presence of God, it has nevertheless its foot in the abyss. And if Paul stood, as no doubt he did, on the topmost round of it, I have been standing, and still stand, on the lowest, in this thirteenth year that has passed since I descended. In such a state of mind, encompassed by the midnight of absolute despair, and a thousand times filled with unspeakable horror, I first commenced author. * I am not indeed so perfectly hopeless as I was; but I am equally in need of an occupation, being often as much, and sometimes even more worried than ever. I cannot amuse myself, as I once could, with carpenters' or with gardeners' tools, or with squirrels and guinea pigs. At that time I was a child. But since it has pleased God, whatever else he withholds, to restore to me a man's mind, I have put away childish things." He then tells his friend and reprover, that he regards not only his occupation, but the associations also into which it had led him, as being entirely Providential, as well as perfectly innocent.

For several years Cowper had been troubled with indigestion. Urged by Lady Hesketh, he at length consulted Dr. Kerr, a physician of note in the neighboring town of Northampton. His prescriptions for a time seemed to have a good effect. Somewhat later Cowper thus writes to Lady Hesketh, "I have not sent for Kerr, for Kerr can do nothing but send me to Bath, and to Bath I cannot go, for a thousand reasons. The summer will set me up again. I grow fat every day, and shall be as big as Gog and Magog, or both put together, before you arrive." Again he tells her that he had just had a voluntary visit from Kerr: "Were I sick, his cheerful, friendly manner would almost restore me. Air and exercise are his theme; these he recommends as the best physic for me, and in all weathers." Sensible Dr. Kerr! Cowper did not always fall into so good hands.

In the summer of 1786, he was gladdened by a visit from Lady Hesketh. It had been long promised and anxiously expected. She took rooms in that very vicarage, which had once been the home of the good John Newton, and still later, of the charming Anne Austen.

This kind and judicious relative no sooner found where and how Cowper was living, than she went to work to improve his condition. She engaged for his future residence, a commodious house at Weston Underwood, about a mile from Olney, and on the estate of the Throckmortons. Greatly to the cheer and comfort of these two invalids, she remained at Olney until late in the autumn. She left them, but promised them an annual visit. The removal to Weston was made almost

immediately after. It was indeed high time. How they survived so long a residence in Olney, is not easy to be understood. Read the poet's own account of the two places, written just before the removal! "The change, will, I hope, prove advantageous both to your mother and me, in all respects. Here we have no neighborhood; there we shall have most agreeable neighbors in the Throckmortons. Here we have a bad air in winter, impregnated with the fishy-smelling fumes of the marsh miasma; there we shall breathe in an atmosphere untainted. Here we are confined from September to March, and sometimes longer; there we shall be upon the very verge of pleasure grounds in which we can always ramble, and shall not wade through almost impassable dirt to get at them. Both your mother's constitution and mine have suffered materially by such close and long confinement; and it is high time, unless we intend to retreat into the grave, that we should seek out a more wholesome residence." To Mr. Newton, on the same topic, he wrote, "Long confinement in the winter, and for the most part in the autumn too, has hurt us both. A gravel walk thirty yards long affords but indifferent scope to the locomotive faculty; yet it is all that we have had to move in for eight months in the year, during thirteen years that I have been a prisoner. * * A fever, of the slow and spirit-oppressing kind, seems to belong to all, except the natives, who have dwelt in Olney many years; and the natives have putrid fevers. Both they and we, I believe, are immediately indebted for our respective maladies to an atmosphere encumbered with raw vapors issuing from flooded meadows; and we in particular, perhaps, have fared the worse, for sitting so often, and sometimes for months, over a cellar filled with water."

Scarcely were they settled in their new abode, ere affliction came in the death of Mrs. Unwin's only son,—Cowper's dearest friend. Grievous it was to him, yet he bore the loss with more composure than his friends expected. But the month of January was at hand,—a month which he had always dreaded, as the period of his previous attacks. It seems, this time, to have begun in what he called a nervous fever, depriving him of sleep, attended with great dejection of spirits, and unfitting him for work. Very soon his malady returned in full force, and continued unabated for six months. All that we know of this attack is derived from his own account after it was over. "My indisposition" he wrote to Mr. Newton, "could not be of a worse kind. The sight of any face except Mrs. Unwin's, was to me an insupportable

grievance; and when it has happened that by forcing himself into my hiding place, some friend has found me out, he has had no great cause to exult in his success. From this dreadful condition of mind, I emerged suddenly; so suddenly that Mrs. Unwin, having no notice of such a change herself, could give none to any body; and when it obtained, how long it might last, or how far it might be depended on, was a matter of the greatest uncertainty." To a recently-acquired young friend, Samuel Rose, he wrote Aug. 27; "My health and spirits are considerably improved, and I once more associate with my neighbors. My head, however, has been the worst part of me, and still continues so; is subject to giddiness and pain, maladies very unfavorable to poetical employment; but a preparation of the bark, which I take regularly, has so far been of service to me in those respects as to encourage in me a hope that by perseverance in the use of it, I may possibly find myself qualified to resume the translation of Homer." To Lady Hesketh, who had cautioned him in regard to using his pen too much, he wrote, Sept. 8: "Those jarrings that made my skull feel like a broken egg-shell, and those twirls that I spoke of, have been removed by an infusion of the bark, which I have of late constantly applied to. I was blooded indeed, but to no purpose; for the whole complaint was owing to relaxation. But the apothecary recommended phlebotomy, in order to ascertain that matter; wisely suggesting that if I found no relief from bleeding, it would be a sufficient proof that weakness must necessarily be the cause. It is well when the head is chargeable with no weakness, but what may be cured by an astringent." On reading the above who is not tempted to exclaim, "Admirable apothecary! most sapient Leech!" Cowper's next letter to his cousin Hesketh ends thus: "I have a perpetual din in my head, and though I am not deaf, hear nothing aright, neither my own voice, nor that of others. I am under a tub, from which tub accept my best love. Yours, W. C."

A few days afterwards we find him thus addressing Mr. Newton: "My dear friend, after a long but necessary interruption of our correspondence I return to it again, in one respect at least better qualified for it than before; I mean by a belief of your identity, which for thirteen years I did not believe. The acquisition of this light, if light it may be called which leaves me as much in the dark as ever on the most interesting subjects, releases me, however, from the disagreeable suspicion that I am addressing myself to you as the friend whom I loved and valued so highly in my better days; while in fact you are not that

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friend, but a stranger. I can now write to you without seeming to act a part, and without having any need to charge myself with dissimulation,—a charge from which, in that state of mind, I knew not how to exculpate myself, and which, as you will easily conceive, not seldom made my correspondence with you a burden." In regard to this singular delusion, Mr. Southey expresses a doubt whether it really existed during the long period named, "or had arisen during the last occurrence of his disease, and was like one of those dreams which perplex us with the semblance of some imperfectly-remembered reality." The question thus raised is curious. The fact that Cowper had never mentioned this strange notion of his during all those thirteen years of intimacy with Newton, may seem to favor Southey's view of the case,—though it is by no means conclusive. In some respects his memory seems to have been uncommonly exact and tenacious; yet his correspondence about this time shows that it was, in one instance at least, singularly at fault. In a letter to Lady Hesketh, Nov. 9, 1785, he informs her that he began to translate Homer on the 12th of November, 1784. This was only a few days after he finished the manuscript for his second volume. In his letter to Newton, above cited, (Dec. 1785,) he alludes to this interval as lasting "some weeks." A year later, (Jan. 13, 1787,) in a letter to the same, he says: "After having written a volume, in general with great ease to myself, I found it impossible to write another page. * * A whole year I waited, and waited in circumstances of mind that made a state of non-employment peculiarly irksome to me. Extreme distress of spirit at last drove me, as if I mistake not I told you sometime since, to lay Homer before me and translate for amusement." Here the brief interval of a week is magnified into a year. In view of it, Southey's conjecture seems less improbable.

He was now so far restored as to be able to return to Homer. Cautioned by his friend Hill not to work too hard at his translation, he said, "I can invent for myself no employment that does not exhaust my spirits more. I will not pretend to account for this. I have even found that those plaything avocations, which one may execute almost without any attention, fatigue and wear me away, while such as engage me much, and attach me closely, are rather serviceable to me than otherwise."

Nearly seven years elapsed between his recovery from the attack just mentioned and the final return of his malady in January, 1794. During this period, or at least during the first five years, he seems to

have been comparatively happy. Besides numerous minor pieces of great beauty, he finished and published the *Iliad* and *Odyssey*; and it is worthy of remark that the most intense ambition for literary fame never urged an author to greater industry, or more solicitous care, than were bestowed by Cowper on this laborious work—undertaken only because work of some sort was essential to his comfort. He was now enjoying a wide and well-established fame. He had a commodious and pleasant home, which was often enlivened by the presence of dear friends. His accomplished neighbors of the "Hall" were as kind as possible. Many old, and many new friends cheered him with their correspondence, and the easy, sprightly letters which he wrote in return, are still read with delight as the most perfect models in their kind. From these epistles (excepting those which he wrote to Mr. Newton,) we might almost deem him one of the happiest of men.

He had scarcely done with Homer, ere he consented to edit a new and splendid edition of Milton. He was to correct the text, to supply notes, and translate the Latin and Italian poems. It was for him no difficult labor, and he was allowed ample time. But it proved an unfortunate engagement. The idea of a task, which must be accomplished within a set period, however long, began to weigh upon his conscience and his spirits, and made labor on that, and on all other things, impracticable.

In December, 1791, Mrs. Unwin had a paralytic attack, followed by another more severe, a few months afterward. From that time she became almost helpless, and demanded for herself the attention which she had so long bestowed on her afflicted companion. His close confinement and deep anxiety on her behalf, could not but affect him unfavorably. For twenty years he had not been more than a dozen miles from Olney; he had declined countless invitations to visit his friends in other places, as something that was impossible for him. Yet now, in the hope that it would benefit Mrs. Unwin, he journeyed more than a hundred miles, and spent six weeks at Eastham in Sussex, the home of his friend Hayley. About this time his "nervous fever" returned, and is repeatedly mentioned in his letters. To counteract it he used bark, and laudanum, and James' powder. In the meantime, poor Mrs. Unwin was gradually sinking into a mental imbecility which made her extremely exacting and unreasonable. The strange illusions which haunted him—the mental terrors—the increasing dejection—his own incessant, but ineffectual resistance—are depicted in his letters, with

great minuteness and wonderful power, and cannot even now be read without painful and sympathizing interest.

In the attack of 1794, his former idea of self-sacrifice seems to have been softened into that of penance required. "Six days," we are told, "he sate, still and silent as death, and took no other food during that time than a small piece of bread dipped in wine and water." From this severity he relaxed, but only partially. "Nothing could dispel or lighten the settled gloom by which he was oppressed." His dearest friends, Johnson, Hesketh, Hayley, were unnoticed by him. A letter came announcing that the King had bestowed on him a pension of three hundred pounds. But he could not even be apprised of its purport. Lord Thurlow commended the poet's case to Dr. Willis, who had then become famous for his treatment of the insane, and Lady Hesketh left her interesting charge to consult the Doctor. Referring to the visit, she wrote as follows to Cowper's friend Rowley: "Whether even his skill will be able to restore this unhappy man, at this distance I cannot at present say; but earnestly hope it may, as I fear Mrs. Unwin will not consent to his removal there; though from the little I saw of the house, and the manner in which the patients are treated, as well as the liberty they seem to enjoy, I am convinced it would be the very best place he could be in, and the one in the which he would be most likely to be restored." Dr. Willis, finding that his prescription had no good effect, afterwards visited the patient at Weston. "It appears to have been his opinion, that more might be hoped from change of air, scene, and circumstances, than from any mode of treatment that could be pursued." The greatest difficulty at this time in doing anything effectual for Cowper, seems to have been the unreasonable and unmanageable will of poor, broken-down Mrs. Unwin.

On many accounts it became necessary, at length, that the establishment at Weston should be broken up. This was accomplished in the summer of 1795, through the energetic kindness of Cowper's young relative, John Johnson. From that time, Cowper and Mrs. Unwin, as long as they lived, were under Mr. Johnson's care. His home was at East Dereham, in Norfolk, and there, after trying two or three other places, the interesting invalid was settled. His delusions and his gloom continued. Now and then he wrote a short letter to Lady Hesketh, full of sorrow, terror, and despair. His kinsman spared no effort to relieve, to rouse, to entertain him. "The only relief which he seemed to experience was in listening to works of fiction; these still retained

their charm." To these, volume after volume, he would listen, sad and silent.

At the close of the year 1796, his faithful and beloved "Mary" quietly departed. It is not easy to read, unmoved, the story of his deportment on that occasion! We cannot stop to describe the absurd attempt of Hayley to convince Cowper that he ought not to think so ill of himself, by getting testimonials from some of the greatest men in the realm, to the effect that the poet had done good service to the cause of morals and religion. Thurlow, in his letter to Lord Kenyon, not unaptly said, "I have been pressed by one mad poet to ask of you for another, a favor which savors of the malady of both."

From the commencement of this attack he had been living under the constant apprehension of being instantly and bodily hurried away into misery which awaited him. This idea was sufficient to deter him from all attempts at literary labor. At length (September 1797,) he so far yielded to persuasion, as to resume the revision of his *Homer*. To this employment, for nearly two years more of his sorrowful old age, he devoted himself with unwearied assiduity, and did not stop until he had completed the task, and written a preface for his new edition. A few days after this, he wrote "The Castaway,"—a piece, which considering the circumstances, has always seemed to us one of the most remarkable, as well as one of the most beautiful and affecting poems ever penned. He survived a year longer, struggling constantly against the pressure of mental disease, but with no sensible relief from its power. He died April, 1800, at the age of 69.

In this brief sketch we have endeavored to confine ourselves to the facts which bear upon and illustrate Cowper's mental disorders. Of these, indeed, we have given only a part. In no other instance within our knowledge, has the life-long history of a diseased mind, been so minutely, so graphically, so powerfully told, as was this of Cowper, in his admirable narrative and inimitable letters. When to this we add the fact—a fact inexplicable and even perplexing whenever met with—that a delusion so entire and distressing could take and keep possession of an intellect, in other respects remarkably bright, and sportive, and clear; when we consider his high reputation as a writer both of prose and verse; his manly, English, common sense; the purity and excellence of his character; the tenderness of his spirit, and the sweetness of his affections—qualities which attracted to him in his hermitage so many living friends, and which have endeared his name and

memory to uncounted thousands, who have known him only through his writings — we have perhaps suggested a sufficient justification for the length and minuteness of our narrative.

But there are other considerations which give interest to the insanity of Cowper. Biographers and critics have discussed, with wide diversity of opinion, its character and causes. The melancholy which ushered in his first attack assumed a religious form. From that attack he passed into a state of high religious enjoyment, which continued for several years without a cloud, and then he became the victim of religious doubts, or rather of a settled conviction that he was rejected of God. At St. Albans, under the guidance of Dr. Cotton, and afterwards under that of Mr. Newton, he adopted and ever after firmly held the Calvinistic faith. That this faith gave shape and color to the imaginations which haunted him in later years, is more than probable. But there is not the slightest reason for supposing that his insanity, as some have intimated, was due to any such cause. We have seen that predisposing tendencies to mental disease appeared even in his childhood, and we know under what circumstances of anxiety and apprehension, those tendencies were at length developed into madness. Had the affair of the clerkship never occurred, Cowper might never have become insane. But the probabilities are otherwise. Some other trouble,—some other excitement—was sure to come, and there, in his brain or blood, ever ready to quicken, were the seeds of disease.

A year or two since, the Rev. Dr. Cheever published a volume entitled "*Lectures on the Life, Genius, and Insanity of Cowper.*" Dr. Cheever is greatly dissatisfied with Southey's biography of the poet, and thinks he has done injustice both to Cowper and Newton. While we are far from regarding Mr. Southey as a faultless biographer, or as beyond the reach of misconception and prejudice, we are decidedly unwilling to accept the reverend doctor's version of Cowper's mental troubles. We can not perceive that he understands any better than did Mr. Newton and Mrs. Unwin the nature of that derangement. To describe as machinations of the devil, the manifest effects of cerebral disorder, seems to us no less mischievous than it is absurd. This idea he repeatedly advances. For instance: "Now this delusion of Cowper, that he was cut off forever from God's mercy, was certainly from below, not from above; the work of an Enemy, not of a Friend; yet even the practical power of that delusion, and the result on which Satan had relied, could be prevented by the omnipotence of God's

invisible grace." And again: "Under this extreme severity of discipline, permitted as Cowper was to be sifted as wheat by Satan, * * to be distracted with frightful dreams in the night time, &c." And this: "We do not wonder that Newton and Mrs. Unwin, and his strongest-minded and most religious friends spoke of it, and regarded it as the power of the enemy. With the New Testament before them, what could seem a more palpable and graphic renewal of those malignant, infernal possessions, which drew the compassion of our Saviour, and required the exercise of his omnipotence? * * Justly did they reason and believe that something more than a natural power was here at work, and that only a supernatural interposition could effect a cure."

Acting on this *just* reasoning and belief, Mrs. Unwin and Mr. Newton, after Cowper's severe attack in 1773, neglected, for several months, all remedial measures,—apparently deeming it wrong even to consult Dr. Cotton. Were a similar case to be thrown upon the hands of Dr. Cheever, would he attempt, at home, to exorcise the demon by argument and prayer? or would he send the poor patient as soon as possible to some well-conducted asylum for the insane?

Southey thought it was injudicious in Cowper's friends to encourage in him the idea that his cure at St. Albans was something supernatural. Cheever thinks that only spiritual blindness prevented the biographer from taking the same view that the poet took. In regard to this belief of Cowper, he remarks: "Yet in the purest and serenest light, both of reason and of faith, Cowper himself was so fully persuaded that his recovery at St. Albans, and his happiness afterward, had come from God and his grace—he *knew* this with such perfect assurance, by the spirit of God bearing witness with his own spirit—that even in a subsequent access of his malady, and under the depths of what seemed the darkness of absolute despair, he declared that it was not in the power of the arch-enemy himself to deprive him of that conviction." Did the doctor, while writing the above forget, that with equally perfect assurance, Cowper also *knew* that the same God had afterwards imposed on him the duty of self-murder, and that for his sin in not obeying the mandate when it was in his power, he was consigned to endless perdition?

We have already mentioned the fact that Cowper's willingness to destroy himself, in conformity with what he regarded as a divine behest, was regarded by Newton as an evidence of pious submission—a mark and proof of divine grace in his soul. We are surprised to find

that the reverend doctor repeats and endorses this strange opinion. That Cowper was a Christian, humble, sincere, and true, it is impossible to doubt. But the evidence of this consoling fact rests on other grounds than these delusions of a disordered brain.

To the affair with Teedon the doctor devotes a short chapter. He is indignant that Southey should speak so lightly of poor Teedon's intercessions. After making a number of hits at the Church of England and at Lord Mahon, and after a short anecdote respecting Archbishop Usher, he concludes thus: "We can see no reason why Mr. Teedon might not offer as earnest and acceptable prayer for Cowper, as Mr. Talbot for Archbishop Secker. And if the archbishop needed such prayer when dying, and was not insane in asking for it, the poet also might have need of it living; and his seeking for it was not necessarily a proof of insanity, but the reverse."

Briefly, the story of Teedon is as follows. He was a poor schoolmaster, living in Olney, and dependent on charity, which he received through the agency of Cowper. From some slight notices in Cowper's earlier letters, we infer that he was a weak, conceited, but well-meaning body, whose pompous speeches sometimes amused the quick-sighted bard. But at a later period—after Mr. Unwin's death, and after his mother's faculties began to fail—Cowper, with her consent and aid, began to consult Teedon, "as a person whom the Lord was pleased to answer in prayer." As Southey represents the matter, there is no suspicion of knavery on the part of the simple-hearted creature. But he had been accustomed to regard Cowper and Mrs. Unwin as greatly his superiors; and when he found them disposed to pay such deference to his spiritual gifts and power, "neither his vanity nor his modesty would allow him to question their discernment." He was first consulted in regard to the question of Cowper's undertaking the edition of Milton—not, as Mrs. Unwin wrote to him, because the poet apprehended any difficulty in the performance, but to ascertain whether he were providentially called to it or not. As to the result, she tells him that Mr. Cowper "is now clearly persuaded, by Mr. Teedon's experiences and gracious notices, that he is called to it, and is therefore perfectly easy." From this time until the last access of his malady, he continued to consult Teedon—not only as to every proposed movement and engagement, but in reference to his hopes and fears, and all his dreaming and waking delusions. The oracular responses which he received in return he carefully recorded, until he

had filled volumes. The record shows that though he was constantly receiving encouragement from Teedon—assurances of relief soon to be vouchsafed—and though his faith in the man, as a favored recipient of communications from Heaven, appears to have remained firm, still he derived but little comfort from the schoolmaster's revelations. With the statements of his experience, his dreams, and his illusions, sent by this great man to poor Teedon, and proving, as we are told, *not his insanity, but the reverse*, we could fill many pages. One remarkable instance of the delusion under which Cowper labored we must not omit. This was a belief that in the stillness of his chamber he often heard words and sentences audibly spoken. Thus, in his own early narrative, he states that in his first attempt at suicide, while he was actually hanging by his garter from the top of the door, he “distinctly heard a voice say three times, ‘*Tis over!*’ Though I am sure of the fact, and was so at the time, yet it did not at all alarm me, or affect my resolution.” During the period of the Teedon correspondence, he seems to have heard voices almost daily, and he regularly communicated the sentences or phrases which thus came into his head, with an evident conviction of their supernatural origin. A specimen or two must suffice. “Dear sir; I awoke this morning with these words, relating to my work, loudly and distinctly spoken: ‘*Apply assistance in my case, indigent and necessitous.*’ And about three mornings since with these: ‘*It will not be by common and ordinary means.*’ It seems better, therefore, that I shall wait till it shall please God to set my wheels in motion, than make another beginning only to be obliterated like the two former. I have also heard these words on the same subject: ‘*Meantime raise an expectation and desire of it among the people.*’”

At another time he wrote thus: “At four this morning I started out of a dream, in which I seemed sitting before the fire, and very close to it, in great trouble; when, suddenly stamping with my foot, and springing suddenly from my seat, I awoke and heard these words: ‘*I hope the Lord will carry me through it.*’ This needs no interpretation. It is plainly a forewarning of woe to come.” On New Year's day, 1793, he wrote to Teedon,—“This morning I am in rather a more cheerful frame of mind than usual, having had two notices of a more comfortable cast than the generality of mine. I waked, saying, ‘*I shall perish,*’ which was immediately answered by a vision of a wine-glass, and these words, ‘*A whole glass;*’ in allusion, no doubt, to the

famous story of Mrs. Honeywood." For that story, see Fuller's account, as quoted by Southey. We add one of his dreams. "In less than a week," he says to Teedon, "I was visited with a horrible dream, in which I seemed to be taking a final leave of my dwelling, and every object with which I have been most familiar, on the evening before my execution. I felt the tenderest regret at the separation, and looked about for something durable to carry with me as a memorial. The iron hasp of the garden door presenting itself, I was on the point of taking that; but recollecting that the heat of the fire, in which I was going to be tormented, would fuse the metal, and that it would therefore only serve to increase my insupportable misery, I left it. I then awoke in all the horror with which the reality of such circumstances would fill me." Such were the visions, the fancied monitions, the vagaries of a diseased imagination, which he transmitted to Teedon, in the hope that through his prevailing intercessions, they might be explained or counteracted, and in regard to which Teedon undertook, and actually pretended to furnish, the results of his own special communications from above. Whether the judgment of Southey, or that of Dr. Cheever, in regard to the Teedon business, is the wiser one, may easily be settled.

HOMICIDE AND INSANITY; THE CASE OF JOHN W. LAYMAN.

JOHN W. LAYMAN, twenty-one years of age, a shoemaker by occupation, of limited education, being able to read and write imperfectly, was admitted to the New York State Lunatic Asylum, on the third of April, 1857. There does not appear to be any immediate inherited predisposition to mental disease in his case, though an uncle is supposed to have had periodical paroxysms of insanity, and a cousin of the mother died insane at the Bloomingdale Asylum. The parents appear to be feebly organized. The father is in poor bodily health, and is able with difficulty to support his family; the mother is an invalid; and a daughter is chlorotic. Layman himself possesses the feeble mental and physical characteristics of his parents; is of slender frame, with a pale countenance, and wandering and unsteady gaze.

THE MURDER.

The name of the murdered man was Cornelius Cannon. He was employed as a farm-servant, in the neighborhood of Fort Hamilton, Long Island. On the twenty-eighth of December, 1856, he had conveyed the members of the family in which he was employed to church. While on his return he was accosted by Layman to whom he was an entire stranger, and who was standing in front of a church near Gowanus. Entering into conversation, the latter was invited to ride. He got into the wagon, and after proceeding the distance of half a mile, left his seat, stepping behind it to the rear of the wagon, drew from his pocket a revolving pistol, deliberately placed it to the back of Cannon's head and discharged it, killing him instantly.

HISTORY.

The history of Layman is derived partly from the testimony elicited at the time of the trial, and partly from the statements furnished by the father on his son's admission to the Asylum.

When a child, he was subject to eruptions upon the face and body, and to scrofulous ulcers behind the ears, which discharged for several years. His general physical health was feeble until he attained the age of ten years. The father and mother were in the habit of regular attendance upon religious services, and were generally accompanied by their son, until he arrived at the age of sixteen, when he began to associate with idle and vicious boys, till at length the parental supervision was altogether eluded.

About this time he commenced to work under his father's care, at making shoes. Though he employed himself with various intermissions till he was twenty-one years of age, he never acquired the ability of self-support. The father states that his son was unable to learn his trade, and was never able to do more than the work of an ordinary apprentice. The father, with the view of inducing a feeling of self-dependence, sent his son to various employers, by all of whom he was in succession discharged for incompetency. He continued his evil associations, and on one occasion was arrested for disturbing the peace on the Sabbath. The habit of masturbation was formed at an early age, and continued till the past year. He was permitted to follow his own inclinations generally, and his movements when in his usual health were frivolous and motiveless. He was considered devoid of the power of application.

In the year 1855, the family having changed their residence the associations of Layman, were, in a measure, broken up. He began to seclude himself more than usual to his room and to the house, and his parents observed a gradual alteration in his general disposition; toward them exhibiting a tendency to be irritable and disobedient; and generally passionate and profane toward his employers. At his customary occupation in his father's shop, he became unsteady and unreliable; and to such a degree did this restlessness increase, that it became a source of considerable anxiety to his parents, and they spoke of it to their immediate friends. When directed to any particular work he would sit down to perform it, and while thus occupied would throw aside the work suddenly, run into the street or to the upper part of the house. When actively employed he was docile, but otherwise was restless and disobedient. About this time he was noticed to be in the habit of laughing when alone; this frequently occurred, also, when at the table, or in the presence of his family without any circumstance to excite it. On one occasion, at the table, he threw down his knife and fork, leaned back in the chair and laughed heartily, much to the annoyance of the family.

Soon after the removal, Layman announced his intention of never leaving the house again. When questioned relative to this resolution his reply was, that his life was in danger from spirits which were constantly watching him and threatening to kill him. He did not feel safe in going out. He stated further that the spirit of a person with whom he had no acquaintance, and of whose existence no knowledge was ever obtained, had manifested some of the secrets of the Free Masons to him, and that in consequence the Masons were offended, and were trying to kill him. The resolution to remain in the house was persisted in from the first of May, 1855, to the month of January, 1856, during which time he on no occasion left home. In January he went out on a cold morning uncomfortably dressed for the purpose of engaging himself as a sailor. In the course of three hours he returned, stating that the shipping agents had refused to employ him, and that he endeavored to enlist as a soldier, but was pronounced unfit. He secluded himself again in the house until April, when he left home, secretly, and was absent from Saturday until Sunday evening following. On his return he stated that he had been to Hackensack, to rid himself from pursuit. Between April and June, he refused to go out of the house; much of this time being provided with a club with which to defend

himself. After June he went out without constraint, though he continued to be harassed with the delusion concerning the spirits, and of his pursuit by them.

In January, 1856, a circumstance occurred, which for the first time excited any serious alarm on the part of the parents of Layman, as to his mental condition. After a day of unusual restlessness he came to the table at supper, and while there, suddenly threw aside his chair, and walked quickly to an adjoining room. He was pursued by his father who found him in a position as if about to cut his throat with a razor. On another occasion laudanum was found secreted in his bed. At various times while engaged at his work, he threw his hammer and lap-stone about the room. He was accustomed also to talk from the windows of the house, when his language would occasionally be so turbulent, and accompanied by such profanity, that he was made to desist that the neighbors might not be alarmed.

For a year previous to the murder, Layman's sleep at night was disturbed. The family occupied a room beneath his, and had abundant opportunity to be familiar with his habits in this respect. He was heard moving furniture, throwing the tables and chairs of his room over, and was frequently found in his night-clothes searching the room and upper part of the house for the spirits. He was also seen standing before a window, using profane and vehement language to persons he declared to be on the opposite side of the street, bewitching him. The disturbance and noise was uniformly attributed to the fear he entertained of these evil influences. In all his conversation the delusion concerning the nature of the spirits has been vaguely expressed. The earliest mention of them occurred about the time of the removal to Charlton street, May, 1855. They were described "as being with him constantly; in the street and in his room; always tormenting him; holding possession of him; and that they had already destroyed him." In attempting to read he found himself unable to do so, or to remember anything that he had read; as the spirits drew from him all the knowledge he acquired. Periods of unusual depression were noticed, accompanied by trembling and cold perspiration. On these occasions he stated that he was dying; that he was filled with spirits, and that one of the spirits left his body at these times. He expressed the conviction he had the right to do anything that occurred to him, as he was gifted with the highest power. When told, on one occasion that he should pray to be forgiven his sins, he replied he had

none, for he was Christ. Expressions similar to these were frequently uttered without any apparent connection with defined delusions. No tendency to violence was observed at any time, though from the threatening language used occasionally it might have been anticipated.

Layman's education was exceedingly limited. He was never known to read a book in course. He appeared to have little knowledge of the value of money. Occasionally he possessed it in a way to be able to control its expenditure, and in this he manifested great improvidence, and lack of judgment.

GENERAL HEALTH, HABITS, ETC.

At the age of eighteen, Layman enjoyed fair physical health, and used proper, ordinary care in his personal appearance. An alteration in both of these particulars occurred coincident with the change in his mental health. Consequent upon restless nights, vicious indulgences, irregularity in taking food, came an impairment of his physical health. The habit of using tobacco was contracted also at an early age, and persisted in to excess. Up to the time of the commission of the murder, he continued to be employed, more or less, at his trade. The father, with a view to a change of location and scene, and inasmuch as his son had arrived at the age of twenty-one, made arrangements for his employment away from home. He was, however, unable to support himself, and was returned to his father by his employer.

CONDUCT OF LAYMAN FROM DECEMBER 27TH, THE DAY PREVIOUS TO THE MURDER, TO THE TIME OF HIS ARREST.

Layman went to his shop with his work as usual, and while his employer's attention was directed to a customer, he took a pocket-book containing \$26, that had been placed upon the counter, and carried it away with him. He then crossed by the ferry to Brooklyn. Having purchased a revolving pistol, he walked out to Gowanus, where he spent the night in a stage-coach. On the following morning he remained in a grocery until it was time for service in church to commence, when he went out in search of one. Finding himself late, he stood upon the church steps, until a man came along in a wagon and invited him to ride. After riding a distance of half a mile, Layman pulled the pistol from his pocket and shot his companion as detailed before. He supported the body in an erect position, and drove a distance of half a mile further to a secluded spot in the road, where he searched and left it by

the road-side. From this point he drove to the Hamilton Avenue Ferry leading to New York, and thence went with the horses and wagon across the Hudson River to Jersey City. At the Brooklyn Ferry Layman's conduct was so strange as to excite suspicion, which was increased by the appearance of blood upon the wagon. He was questioned relative to this, and replied that he had been to a butcher shop. On arriving in Jersey City he was arrested in the act of exchanging the wagon for a saddle, and conveyed to the Kings County jail.

CONDUCT AFTER THE MURDER.

After Layman's arrest, he was visited by reporters for the press, to whom were communicated freely and correctly the particulars of all his movements, from the time of his leaving home till the commission of the murder. He stated that the pistol was purchased for the purpose of committing murder; that he was tired of living in a state of poverty longer; intended, and prepared himself to kill the first man that appeared to possess any money; supposed this man was returning from market and would have money; determined to kill him on getting into the wagon. During the morning a man had passed him, and intended to shoot him, but on reflection concluded he had no money. When asked if he had ever seen deceased before, and what his motive was in killing him, he replied promptly, "I never saw the man before, but I felt as though I could not stand it much longer, and wanted money. I shot the man for his money, and nothing else." Within two years past had frequently meditated a deed of this kind; and commencing stealing as a means of livelihood. After the commission of the murder, finding he had obtained no money, regretted the act, but thought that otherwise he would have been entirely satisfied. He desired to obtain money to go to Louisiann, where he had some friends. He said, also, that he was reproached by the spirits for his poverty and degradation.

The investigation into the cause of deceased's death led to an examination into Layman's mental condition by several medical men on the following day. He appeared to them calm; with a pulse of 85; manifested no unusual excitement, and related the circumstances of the murder as detailed above. The physicians expressed the opinion that he was insane. On the 23d of March an investigation of a preliminary nature was held, at the court of Oyer and Terminer of Kings county, into the prisoner's present mental state, which resulted in his being sent to the State Lunatic Asylum at Utica.

OBSERVATIONS.

Viewed in its medical and psychical aspects, there is little novel or striking in the case here given. A youth, born of parents feebly organized and deficient in intellect, exposed from childhood to the depraved associations of the worst sections of a great metropolis, reaches a forced puberty, and under the continued indulgence of every vicious habit and sanitary neglect begins to dement. Delusions of fear and suspicion cause habits of seclusion, and the prevalent forms of popular error shape his disjointed and partially automatic conceptions. True, in the dreadful homicide which calls our attention to this case, we have the catastrophe usually connected with other varieties of insanity. Mania, rather than dementia, an exaltation or morbid direction of the mental force, rather than its abstraction, is generally associated with these dreadful fatalities. But, though more often the events of an insane fury, or the working out of purposes based upon fixed and consistent delusions, yet in unmistakable dementia, through that infinite series of mental conditions whose permutation we can so imperfectly trace, there does occasionally combine to produce a tragedy like that of the Layman homicide.

It will be included with the second of Dr. Bucknill's three classes of insane homicides: that in which with evident insanity there is no evidence of a delusive motive, or a delirious manifestation. Unlike what is sometimes seen in cases of maniacal homicide, in this the period of the murder the arrest and examination was passed without any effect to hasten or retard the progress of the disease.

The legal bearings of the case are perhaps more singular and suggestive. We may first observe that the facts of the legal investigation and disposal of the homicide, taken with those of his subsequent medical history, render it quite unlikely that the more important relations of the act have been designedly concealed or distorted. These, as brought to light immediately upon the arrest of Layman, pointed to a deed of wantonness and depravity, which, however impossible for any one to connect with a sufficient motive, yet seemed the more to call for summary and condign punishment. From its occurring just after a notorious insult had been offered to the public sense in a plea of moral insanity—the Huntington case—the judicial vengeance was loudly invoked, and nothing could have stayed its consummation but the plain fact of mental unsoundness and irresponsibility in the offender.

The curious fact in this case is, that although such irresponsible con-

dition was determined with very little uncertainty, yet not one of the well-recognized, logical tests of unsoundness excusing from the penalties of crime, would have allowed such a conclusion. If the capability to perceive the moral character, the right or wrong, of an act had been made the criterion, Layman must surely, as has occurred to many others like him, have been taken from its Procrustean limits to the gallows-tree. His whole conduct shows that he knew the wrongfulness of murder, and his replies upon examination at various times confirm the fact. Nor could there be proved the existence at the time of the murder of any delusion as to facts which if true would make the homicide justifiable; nothing in his conduct or language on the occasion goes to support this theory. The "spirits," of whose influence he had spoken, had not half so much manifested their tendency to the non-sensical or the depraved in him as in a large number of the community in which he lived. It is very unlikely also that he had any delusive apprehension of an enemy in a person whom he had never before seen, and who had proffered him a favor; indeed, there is no evidence of any fixed or tangible delusion entertained at or near the time of the murder. Further, this is certainly not a case in which a sudden and uncontrollable impulse, in the usual understanding of that plea, determined the fatal deed. Neither could have been sustained for a moment the defense that he, in an insane desperation, had deemed highway robbery a proper mode of relief from abject want. The homicidal act is a result for which, after the fullest information respecting Layman, and his state of undoubted mental depravation, we are entirely unprepared to account. It remains simply to accept the act, and the bare condition of mental unsoundness, respecting neither of which there can be the least question, and content ourselves as best we may. There might no doubt have been found points in the case salient and solid enough for the light weights of legal rhetoric and medical metaphysics to hang upon. But to what good all the mock passion of the one and the mystic definitions of the other? The case appeals simply to that appreciation of a mental state which is acquired through observation and study of the insane. As such it was correctly, though not in legal form finally, disposed of.

It seems to us that the accumulation of cases like this need not be much greater, before the trial of the question of insanity may be taken from the courts, where the logical formulas, old and new, of mental unsoundness are produced and constructed to be as surely disproved.

to the intense satisfaction of the "learned counsel," the infinite vexation of the medical witnesses, the complete mystification of the jury, and the unsatisfactory final result.

From the statements of Layman, consistent in themselves, and borne out by the circumstances of the murder, and his subsequent mental condition, it is highly probable that, after the taking of the money from his employer's shop, where the sight of it lain carelessly at hand suggested the theft, came the notion of highway robbery. The favorite drama of himself and fellows, "Jack Sheppard," and the numerous kindred crimes daily committed near him, pointed to this, and the pistol was purchased. Not having, in his contemplation of the robbery, gone beyond the presenting of the pistol with the demand for money, after the style of highwaymen in romance, when he found himself close at the side of a person much stronger than himself, he saw the probable result of such a course, and fired the fatal shot without a warning. His whole subsequent history illustrates his condition of general dementia, which has continued slowly to grow more profound, and without any symptoms favorable to his recovery.

DISTRIBUTION OF LUNATIC HOSPITAL REPORTS.

THE Association of Medical Superintendents of American Institutions for the Insane, at their late annual meeting, in New York, wishing to diffuse, as widely as possible, the knowledge of mental disease, and the means which are and have been used to manage and relieve it, and also desiring to make their own experience and observations as useful and profitable to others as may be, voted unanimously,

"That the superintendent or government of each hospital or asylum for the insane, should be advised to send, by mail or otherwise, one copy or set of all past reports as complete as possible, and a copy of all future reports of their several institutions, to certain public libraries, and literary and scientific associations, in the several states of America, for permanent preservation and use.

"That a committee be appointed to select and designate these depositories of the hospital reports, and to publish the list, when so selected and prepared, in the *JOURNAL OF INSANITY*, for the information and guidance of the several superintendents.

"Dr. Edward Jarvis, of Dorchester, Massachusetts, was appointed as this committee."

In pursuance of the above vote, the committee proceeded, at once, to make the selection, and prepare the list of libraries and institutions that should be permanent recipients of these reports. This was soon done, as far as his own personal knowledge and that of his immediate friends could guide him; yet this did not reach all of the states, especially some of those more distant, and more recently settled and organized. The needed information from these was sought by correspondence with literary and scientific gentlemen who resided in them, or were supposed to be familiar with their conditions and wants. Most of these gentlemen responded, yet, in regard to some states, no satisfactory information was thus obtained. In this difficulty, the government of the Smithsonian Institution, at Washington, D. C., which had previously prepared and published a valuable report upon the libraries in the United States, and is now preparing another more ample and complete on the same subject, very promptly and courteously sent a notice to the committee, approving the plan, and encouraging the purpose, and offering their aid in making the selection of the depositories for these documents.

The time required for this correspondence with all and distant parts of the country, and for making this list as perfect and satisfactory as possible, has necessarily delayed the preparation of this report, and prevented its publication in the October number of the *JOURNAL OF INSANITY*, as was intended. Yet it is not now too late for the distribution of the reports for 1857; and the distribution of those which have been published in previous years, and of those which shall be printed hereafter, will not be affected by it.

The following list of depositories of the reports of hospitals has been selected by the committee, and it is to be hoped, that by their means, these documents will be placed within the reach of all legislatures, at least, and of the leading psychological and medical students, the philanthropists, the political economists and statesmen of the country who wish to know of this matter, or who are or may be called upon to take any responsibility concerning it.

LIBRARIES AND INSTITUTIONS TO WHICH THE REPORTS SHALL
BE SENT.

MAINE.		NEW HAMPSHIRE.	
State Library,	Augusta.	State Library,	Concord.
College Library,	Brunswick.	Atheneum,	Portsmouth.
Atheneum,	Portland.	Historical Society,	Concord.
College Library,	Waterville.	College Library,	Hanover.
Historical Society,	Brunswick.		

VERMONT.

State Library, Montpelier.
 College Library, Burlington.
 College Library, Middlebury.
 Historical Society, Montpelier.

MASSACHUSETTS.

State Library, Boston.
 Athenaeum, Boston.
 College Library, Cambridge.
 Antiquarian Society, Worcester.
 Statistical Association, Boston.
 Middlesex Mech. Library, Lowell.
 College Library, Amherst.
 College Library, Williamstown.
 City Library, New Bedford.
 Historical Society, Boston.
 City Library, Boston.

RHODE ISLAND.

State Library, Providence.
 University Library, Providence.
 Redwood Library, Newport.

CONNECTICUT.

State Library, Hartford.
 College Library, New Haven.
 College Library, Middletown.
 Historical Society, Hartford.

NEW YORK.

State Library, Albany.
 Historical Society, New York.
 Astor Library, New York.
 Mercantile Library, New York.
 College Library, Schenectady.
 Young Men's Association, Buffalo.
 Athenaeum, Rochester.
 College Library, Clinton.
 City Library, Brooklyn.
 College Library, Hamilton.
 College Library, Geneva.
 N. Y. Society Library, New York.

NEW JERSEY.

State Library, Trenton.
 College Library, Princeton.
 College Library, New Brunswick.
 Library Association, Newark.

PENNSYLVANIA.

State Library, Harrisburgh.
 Philosophical Society, Philadelphia.
 Historical Society, Philadelphia.
 Loganian Library, Philadelphia.
 College Library, Carlisle.
 College Library, Canonsburgh.
 Mercantile Library, Pittsburgh.
 Alleghany Coll. Library, Meadville.
 Easton Library, Easton.

DELAWARE.

State Library, Dover.
 College Library, Newark.

MARYLAND.

State Library, Annapolis.
 Historical Society, Baltimore.
 College Library, Emmetsburgh.
 Baltimore Library, Baltimore.

DIST. COLUMBIA.

Congress Library, Washington.
 Smithsonian Institution, Washington.
 College Library, Georgetown.

VIRGINIA.

State Library, Richmond.
 Historical Society, Richmond.
 College Library, Charlottesville.
 College Library, Williamsburgh.
 Washington College, Lexington.
 College Library, Boydton.

NORTH CAROLINA.

State Library, Raleigh.
 College Library, Chapel Hill.
 College Library, Wake Forest.

SOUTH CAROLINA.

State Library, Columbia.
 Charleston Library, Charleston.
 Medical College, Charleston.
 Athenaeum, Columbia.

GEORGIA.

State Library, Milledgeville.
 Historical Society, Savannah.
 Medical College, Augusta.
 College Library, Athens.

FLORIDA.

State Library, Tallahassee.
 Historical Society, St. Augustine.

ALABAMA.

State Library, Montgomery.
 College Library, Spring Hill.
 University Library, Tuscaloosa.
 Franklin Society, Mobile.

LOUISIANA.

State Library, Baton Rouge.
 Academy of Sciences, New Orleans.
 Centenary College, Jackson.

TEXAS.

State Library, Austin.
 Baylor Univ. Library, Independence.

MISSISSIPPI.

State Library, Jackson.
 University Lib. Oxford, Lafayette Co.
 Oakland Coll. Library, Claiborne Co.

TENNESSEE.

State Library, Nashville.
 University Library, Knoxville.
 College Library, Marysville.
 Med. College Library, Memphis.

KENTUCKY.		Mechanics' Institute,	Cincinnati.
State Library,	Frankfort.	Atheneum,	Zanesville.
Med. College Library,	Louisville.	University Library,	Delaware.
College Library,	Lexington.	Kenyon Coll. Library,	Gambier.
College Library,	Georgetown.	University Library,	Athens.
College Library,	Bardstown.	College Library,	Marietta.
Mechanics' Institute,	Louisville.	West. Res. Med. College,	Cleveland.
ARKANSAS.		WISCONSIN.	
State Library,	Little Rock.	State Library,	Madison.
MISSOURI.		Y. M. Assoc. Library,	Milwaukee.
State Library,	Jefferson City.	College Library,	Beloit.
University Library,	St. Louis.	Historical Society,	Madison.
College Library,	St. Charles.	MICHIGAN.	
University Library,	Columbia.	State Library,	Lansing.
Mercantile Library,	St. Louis.	Young Men's Association,	Detroit.
IOWA.		University Library,	Ann Arbor.
State Library,	Iowa City.	CALIFORNIA.	
Historical Society,	Burlington.	State Library,	Sacramento.
College Library,	Davenport.	Mercantile Library,	San Francisco.
MINNESOTA.		Maryville Library,	Maryville.
State Library,	St. Paul.	WASHINGTON.	
Historical Society,	St. Paul.	Territorial Library,	Olympia.
ILLINOIS.		OREGON.	
State Library,	Springfield.	Pacific University,	The Grove.
Mechanics' Library,	Chicago.	CANADA WEST.	
College Library,	Jacksonville.	Assembly Library,	Toronto.
College Library,	Lebanon.	Mercantile Library,	Montreal.
German Lib. Belleville,	St. Clair Co.	Mercantile Library,	Hamilton.
INDIANA.		School of Medicine,	Toronto.
State Library,	Indianapolis.	CANADA EAST.	
University Library,	Bloomington.	Historical Society,	Quebec.
University Library,	Greencastle.	NEW BRUNSWICK.	
Public Library,	Vincennes.	Provincial Gov't Library,	Fredericton.
College Library,	Crawfordsville.	NEWFOUNDLAND.	
Y. M. Christ. Associat'n,	New Albany.	Government Library,	St. Johns.
OHIO.		NOVA SCOTIA.	
State Library,	Columbus.	Legislative Council Library,	Halifax.
Mercantile Library,	Cincinnati.	Kings College Library,	Windsor.
University Library,	Oxford.	Nova Scotia Hospital,	Dartmouth.
College Library,	Yellow Springs.		

This may seem a long list—one hundred and sixty-one to which these reports shall be sent in each year. It is not to be supposed, that all can send the whole of their past reports to so many, for many have already exhausted their earlier documents; yet it is to be hoped that as many of these as can be spared will be sent, and as many complete sets as possible be distributed. If the superintendents can not send to all, they will of course make such selection of the recipients as may seem the most important to them. In preparing the list, the committee endeavored to arrange the libraries of each state in the order of their importance, or their capacity and opportunity to do the most good with these reports.

Although this list is as complete as the committee can now make it, there may be a reasonable ground of fear, that it will not entirely answer its purpose in all places. There may be, and probably there are, other important libraries and institutions which should receive these reports, which would give them a secure and lasting resting-place, and allow them a wide and an active sphere of usefulness. It may be that more should be sent to some states, and fewer sent to some others. As this is the first attempt at such a distribution, it must be considered as experimental and subject to correction, and capable of improvement. If, then, those who are interested in this matter, and familiar with the conditions and wants of the states and their means of diffusing this information, can suggest any better selection of depositories, it is to be hoped that they will so inform the committee, who will cheerfully publish the correction, and advise the superintendents of the better way through the future numbers of the JOURNAL OF INSANITY.

These hospital reports include the history of insanity and its management through the several years since those institutions have been in operation. They are valuable to all the superintendents and officers of similar establishments, for they show the results of a wide experience and long continued observation of the manifold phases of mental disorder, and of the varied methods of treatment. But beside those who are actively and intimately engaged in the management of the insane, there is a large class in the world who would read, enjoy, and profit by these documents, and who desire and ought to have them within their reach—especially those who are connected with our national and state governments, the legislatures and the executives, who have the responsibility of creating, sustaining, and providing for the management of these institutions;—they need the light that is to be found in these descriptions and histories of lunatic asylums, and should have them in their public libraries where they can be easily found and consulted.

There are thirty-eight lunatic hospitals in the United States, and two in the British provinces, now in active operation, whose reports have been printed and sent to this committee, and most of them in complete series from their beginning. There are two other hospitals,—in Quebec and in Georgia, long in successful operation, but it is not known whether they publish reports of their doings and progress, as none have been received. Beside these forty-two public institutions now filled with patients, there are several others in process of erection.

One certainly, that at Northampton, Massachusetts, and, we believe, that at Kalamazoo, Michigan, are soon to be opened for use; and, we doubt not, that before many years every state will have its asylum for its insane; and several of the states that have now one or more will add others, until all of their diseased in mind shall be provided with the proper means of protection and cure.

The reports of these many institutions will form an invaluable contribution to medical and psychological science, and by being distributed to these several libraries and places as herein proposed throughout the country, and open to the examination of all interested in this human suffering, those who are and shall be engaged in this work of healing the worst of mortal ills will let their lights be seen, and extend their influence far beyond their present sphere even to the remotest states of the Union, and, through periods of time, far beyond their present temporary notoriety.

Believing, then, that it is for the credit and honor of the superintendents and managers of these noble charities, that their reports and the histories of their doings should be everywhere read, and the results of their observations and experience be everywhere known, and that it is for the good of humanity that these records should be diffused as widely and placed within the reach of as many as possible, it is reasonable to expect, that all the officers of these institutions will concur in the vote of the Association, and send all their past and their future reports to the depositories which have been designated by the committee, for permanent preservation and universal use.

For the Association of Medical Superintendents of American Asylums.

EDWARD JARVIS.

Dorchester, Massachusetts, Dec. 10th, 1857.

THE PATHOLOGY OF INSANITY. BY J. C. BUCKNILL, M. D.

Continued from page 193.

It has been unfortunate for the cause of cerebral pathology; that those writers who have devoted much care and attention to the observation of cerebral changes presented in *post-mortem* examinations, have either lacked the desire or the opportunity to make themselves acquainted with the mental phenomena which had preceded death. The careful and minute detail of appearances observed in the brains of persons supposed to have died insane, disconnected from any account of the symptoms which existed during life, is of comparatively little value in the present imperfect state of pathological science. A few fossil teeth and bones of a Professor Owen to reconstruct the probable similitude of an extinct animal; but the science of pathological anatomy has attained far less certitude than that of comparative anatomy; and even the able descriptions of the *post-mortem* examinations made in Bethlem by Dr. Webster, have their practical value diminished from the want of some account of the symptoms which in each case preceded death. The descriptions of the older anatomists, Morgagni, Boerhaave, and others have the same defect; a defect, indeed, of which Morgagni was fully sensible, and of which he offers an explanation, or rather an excuse, in the fact that the medical men who had observed the cases during life frequently did not know whether to call the patients melancholics or maniacs; and that, indeed, "melancholia is so nearly allied to mania that the diseases frequently alternate, and pass into one another, so that you frequently see physicians in doubt whether they should call a patient melancholic or a maniac, taciturnity and fear alternating with audacity in the same patient; on which account when I have asked under what kind of delirium the insane people have labored whose heads I was about to dissect, I have had the more patience in receiving answers which were frequently ambiguous, and sometimes antagonistic to each other, yet which were, perhaps, true in the long course of the insanity." *De Sedibus et Causis Morborum*, Epist. VIII.

Of the thirteen examinations recorded, Morgagni himself made eleven; his pupils made one; and the other one was made by Valerius.

The appearances noted by them in this small number of dissections, include a large part of the morbid appearances which extended observation, and the advantages derived by later anatomists from the instructions of those preceding them, have been able to distinguish. In one or other of the cases, the dura-mater was found thickened and adherent to the cranium—the vessels of the meninges distended with dark blood; serum was found between the meshes of the pia-mater, sometimes in large quantity; there were also air-bubbles in the vessels of the pia-mater; the consistence of the brain altered, sometimes soft, sometimes more or less hard; discoloration of the medullary substance, from distension of its blood vessels; serum in the ventricles, sometimes clear, sometimes turbid; the choroid plexus sometimes injected, in others containing cysts; the vessels of the brain sometimes distended with black and fluid blood; in one instance the coats of the arteries were unusually firm. (Query, atheromatous?) In one instance a fibrinous clot occupied the whole of the longitudinal sinus. This occurred in a young woman who died with general prostration of the vital powers. It is probably the earliest instance recorded of this appearance, and is interesting in connection with Dr. C. B. Williams' views on the formation of fibrinous clots in the cerebral sinuses of asthenic subjects.

Of the thirteen insane persons dissected by Morgagni, it is remarkable that no less than four came to an untimely end. One threw himself out of a window in the night, and was killed. One was tied by the throat by his keeper so that he was strangled. One was starved to death during severe weather; and one, after recovery from insanity, died from inflammation of the intestines, occasioned by a finishing dose of black hellebore.

Morgagni concluded that the cause of insanity existed in many cases in the morbid changes of the pineal gland, and in many others in an induration of the brain. We are informed, that in his examinations he was in the habit of removing the head from the trunk, for the sake of convenience, before he examined the brain. This indicates forcibly the difference between the accuracy and delicacy of the examinations made by the greatest of the old pathologists and those of the present day. An examination conducted after this fashion would be little likely to offer evidence of moderate serous effusions, or the less obvious conditions of hyperæmia. The pathological records of insanity made by other anatomists of the last century are still less marked by exact ob-

servation than those of Morgagni, and are, perhaps, more interesting to the medical antiquary than to the modern pathologist.

A brief reference to them may, however, be instructive, as shewing that the changes which still most readily catch the attention of observers were noted.

Bonetus observed hypertrophy of the brain; obliteration of the sutures; the dura-mater adherent to the cranium and turgid with blood; the pia-mater turgid with blood, and not insinuated between the convolutions; water in the ventricles and other parts of the brain, in large quantity; the substance of the brain marked with a black spot, and sometimes with an infinite number of bloody spots, especially on pressing it—in one case, dry, hard, and friable.

Boerhaave mentions that the brain of maniacs has been found dry, hard, and friable, and of a yellow color.

Haller classified the observations made by others upon the brains of insane and phrenetic persons, and concludes thus: "From these few observations, for which we are chiefly indebted to Morgagni, but little certainly can be derived; since it not only frequently happens that we can discover no disorder in the bodies of maniacs, or even of such as have been totally insensible; but where we do, we are as far from being able to perceive a uniform connection between any one disorder of the mind and some corresponding preternatural state of the contents of the skull, that the very same appearances are exhibited after those most opposite disorders, idiotism and phrenzy; which last seeming inconsistency may possibly appear less extraordinary if we consider the symptoms of drunkenness and phrenzy, in which we may observe that the very same cause produces at first delirium, and afterwards, as the disorder advances, drowsiness and insensible stupor. This, however, seems evident, that in the disorders of the mind, the brain and its connections are unusually affected; and when, in some rare instances, we can discover no disease of these parts, we may conclude, either that it is seated in their very elementary particles, or has not been sought for with sufficient patience and attention.—(*Elements of Physiology.*)

Græding, in 216 cases, found the skull unusually thick in 167 cases; the dura-mater adherent to the cranium in 107 cases; the pia-mater thickened and opaque in 86 out of 100 cases of mania; and beset with small spongy bodies in 92 out of 100 cases. He observed effusions of serum between the dura and pia-mater in 120 out of 216 cases of insanity, and in 58 out of 100 maniacal cases; the lateral ventricles were

distended in fifty-two cases. The choroid plexus was found healthy in only 16 out of 216 cases of insanity; and it was thickened and full of hydatids in 96 out of 100 maniacs.

These records will convey strongly the impression, that however exact the observations of this pathologist might have been, he did not interpret the morbid appearances as we are accustomed to do at the present day. Effusions of serum between the dura-mater and the pia-mater, and diseased conditions of the choroid plexus, are certainly not so common as he represents them.

Meckel remarked the increased density of the cerebral substance in the bodies of the insane.

Sammering and *Arnold* confirmed this observation; and the latter expressed his conviction that insanity was occasioned by the increased density of the cerebral substance, and of those parts of the brain by means of which the soul is connected with the body.

Portal declared that all mental diseases were the effects of morbid alterations in the brain, or spinal chord. He enumerates a great number of alterations, but with so much looseness, that little reliance can be placed upon them. He enunciates, however, on this subject, the following sound and philosophical doctrine, which to the present day may well serve as a text for works in this difficult and obscure department of pathology. "Morbid alteration in the brain or spinal marrow has been so constantly observed, that I should greatly prefer to doubt the sufficiency of my senses, if I should not at any time discover any morbid change in the brain, than to believe that mental disease could exist without any physical disorder in this viscus, or in one or other of its appurtenances."

Pinel had no confidence in the revelations of pathological anatomy. In the preface to his excellent work on "Mental Alienation," referring to the labors of *Greding*, he remarks, "But although one must eulogize his efforts to throw new light upon the organic affections of the insane, is it possible to establish any relation between the physical appearances manifested after death and the lesions of intellectual function which have been observed during life? What analogous varieties does one not find in the skull and brain of persons who have never shown any sign of aberration of mind! And therefore, how can we succeed in fixing the limits which separate that which is normal from that which must be held to be the result of disease?" (p. xx.)

In the body of his work (p. 142.) he refers the primitive seat of ma-

nia " to the region of the stomach and intestines; from whence, as from a centre, the disorder of the understanding is propagated by a species of irradiation. A feeling of constriction, &c., manifests itself in these parts, soon followed by a disorder and trouble of ideas."

Well might Gall exclaim, in reference to these opinions of the great reformer of the treatment of insanity, and to other opinions, scarcely more philosophical, on the same point, of Pinel's eminent pupil and successor, Esquirol: "It is a sad business that in writing for men who ought to have the clearest ideas upon mental disease, it should be necessary to commence by establishing the true seat of mania (Lamétrie, p. 223); and he adds that M. Fodéré actually undertakes to prove that the brain is neither the seat of inclination, instinct, or mental power, much less of mania or delirium."

In justice to Pinel it should be remarked, that however mistaken his views upon the pathology of insanity may have been, they at least had the merit of referring a bodily disease to a bodily origin. In the preface to the second edition of his work, he thus wisely expresses an emphatic condemnation of metaphysical theories on this point: "The most difficult part of natural history is, without doubt, the art of well observing internal diseases, and of distinguishing them by their proper characters. But mental alienation presents new and diverse difficulties and obstacles to surmount, either in the unusual gestures and tumultuous agitations which it occasions, or in a kind of disordered and incoherent chatter, or in a repulsive or savage exterior. If one desires to account for the phenomena observed, one has to fear another rock—that of intermingling metaphysical discussions and divagations of ideology with a science of facts."

Esquirol, the pupil of Pinel, adhered with affectionate pertinacity to the opinions of his great master.

M. Esquirol states in the "Dictionnaire de Sciences Médicales," that the principal changes observed in the brains of insane persons are—The cranium frequently thick, sometimes eburnated, sometimes with thickness of the diploe, very frequently injected, more rarely thin; its thickness variable in different regions; the dura-mater adherent either to the vault or to the base of the cranium, sometimes thickened, frequently its vessels developed and injected; the internal face of the dura-mater clothed with a membraniform layer, as if the fibrine of coagulated blood had extended itself in the form of a membrane. Almost always between the arachnoid and pia-mater serous or albuminous effusions

are found, which cover, and almost efface the circunculations. Effusions at the base of the brain are common; they exist almost always in the ventricles."

In M. Esquirol's great work *Des Maladies Mentales*, published so recently as 1838, his opinions on pathology are considerably modified. Referring to the case of a recent maniac, who was killed by one of her companions, and in whose body he and his pupils were surprised to find no lesions of the brain or its meninges, he says: "Hence it happens that the brain and its meninges are without lesion, although the maniac may have been so many years. The nature, the extent, and the seat of lesions, have no relation with the violence or extent of the delirium. When authors have met with lesions of the brain or its membranes, they have but established the existence of disordered movements during life, of paralysis or convulsions. If one follows with attention the progress of the malady, one may be able, by the symptoms of complication which are added to the insanity, to assign the period when the lesion commences. On the other hand, what organic lesions of the brain or its meninges have not escaped the most attentive observation? When mania persists a long time, does not general enfeeblement, during the last days of the patients, dispose them to local inflammations? Do not the symptoms of meningitis, of sanguineous congestion, of cephalitis, the cephalic lesions which one observes in *post-mortem* examinations—do not these belong to the phenomena which precede death? Have people taken the care to distinguish simple from complicated mania? It is certain that it is in maniacal cases where one does not find cerebral lesions. Maniacs are the patients who are cured suddenly. There are others who live twenty or thirty years, in spite of the organic lesion of an organ whose influence makes itself felt by all the organs most essential to life. The accessions of intermittent mania cease spontaneously. What is the conclusion to be drawn from all this? That pathological anatomy, in spite of the very important labors of MM. Foville, Calmeil, Bayle, Guislain, has not been able to make us acquainted with the organic cause of mania. Thirty years ago I would willingly have written upon the pathological cause of madness. At the present day I would not attempt a labor so difficult, so much of uncertainty and contradiction is there in the results of the necropsy of the insane made up to this time. But I may add that modern researches permit us to hope for ideas more positive, more clear, and more satisfactory."

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M. Foville describes in acute cases injection of the pia-mater existing in a greater or less extent, according to the degree of inflammatory action in the cortical substance. In chronic cases he describes opacity and thickness of the membranes, adhesion of the membranes to each other, granulations of the pia-mater, and false membranes. The gray substance, he asserts, is in acute cases intensely red on its surface and in its substance. This redness is most vivid in the frontal and vertical region. The redness is not uniform, but mottled and diversified with spots of a violet hue, and with minute extravasations of blood. He describes the consistence of the cortical layer underneath its surface to be diminished, the surface itself being somewhat indurated. In acute cases, the pia-mater, he says, is not adherent to the cortical substance, while in chronic cases it frequently is so; and in this fact he sees an important distinction, capable of explaining the incurability of chronic mental disease. In chronic cases, the superficial or outer layer of the cortical substance becomes indurated, and capable of being separated from the inner layer, which is softened and mammillated; the outer layer is harder, the inner layer is softer; the outer layer browner and frequently paler, the inner layer redder than natural. Atrophy of the convolutions he also describes as frequent; and this may be confined to the cortical substance, the surface of which is marked with irregular depressions filled with serum. The gray substance is sometimes softened throughout its thickness, and changed to a brownish color; the softening of the gray matter is sometimes so great that it may be washed off the white matter (which is sometimes harder than usual) by pouring water upon it.

The medullary substance is frequently injected, shewing numerous bloody points when divided; sometimes it is more uniformly discoloured, and has a purplish hue; sometimes it becomes exceedingly white and indurated; sometimes, however, when indurated it has a yellowish or grey tinge. Induration of the medullary substance is attributed by M. Foville to the adhesion with each other of the planes of the several fibres, of which he believes the mass of the white substance to be composed, and which are united to each other by fine cellular tissues.

These observations of M. Foville, made partly at the Salpêtrière and partly at St. Yon, are highly important and instructive. They agree in many respects, as we shall hereafter see, with the precise and admirable researches of M. Parchappe; and although in some respects it may be difficult to verify their correctness, in the *post-mortem* rooms of

institutions where but a few cases are examined, it is certain that the leading features of pathological change in the substance of the brain, which were first indicated by M. Foville, are to a greater or less extent recognizable in a great number of bodies, and amply deserve full and patient investigation, in order to establish their nature and their connection with the various forms of insanity.

The researches of *Bayle* and of *Calmeil* have reference rather to a particular form of insanity, namely, general paralysis, than to the pathology of mental disease at large. M. Bayle attributes insanity to inflammatory irritation of the membranes of the brain, and paralysis accompanied by loss of mental power (dementia), to pressure exerted upon the brain by effusions resulting from this inflammatory state.

M. Calmeil attributes insanity in general to a chronic inflammation of the brain, and general paralysis in particular to chronic inflammation, followed by induration of the fibrous substance.

M. *Lélut*, who published in 1836 his work upon "The Value of Cerebral Alterations in Acute Delirium and Insanity," came to conclusions opposed to those of the author last mentioned. He sums up the result of his researches in the following words:

"1st. Numerous alterations of the brain and its envelopes are met with in delirium and insanity, especially in extreme forms of the latter; but these alterations are neither constant nor exclusive.

"2ndly. Hence it must be allowed that the more or less local and coarse alterations in the skull, the brain and its membranes, can not be held to be the proximate causes of insanity. They are, doubtless, capable of existing with a delirious or insane condition, but they do not constitute this condition, and frequently they are only the exaggeration, the effect, or the transformation of it.

"3rdly. That which may be given as the nearest approach to the proximate cause of delirium, and to the most acute form of insanity, is inflammatory lesion of the brain and its tunics. But this alteration neither does nor can constitute the state which is anterior to it, and may even destroy life without producing it.

"4thly. The conditions of the brain which approach the most closely to the proximate cause of the chronic forms of mental alienation, with or without impairment of motion, are without doubt chronic inflammation of the substance and of the membranes of the brain, its atrophy and induration, which may be accompanied by variations in its specific gravity. But yet these alterations are not the proximate cause of

these forms of insanity, because they are neither constant nor exclusive, and they do not make themselves apparent except in an advanced period of the disease." The logic by which M. Lélut arrives at these conclusions appears scarcely more reliable and consistent than the organic lesions which are, and are not, according to him, the cause or the condition of insanity. Inflammatory lesions of the brain are, according to him, very near being the cause of acute insanity; but they are not the cause, because insanity may destroy life without producing them. Chronic inflammations also are very near being the cause of chronic insanity. (*les conditions du cerveau qui si rapproche le plus de leur cause prochaine*), but yet they are not the proximate cause because they only make themselves obvious after a while.

Some years subsequently to the publication of M. Lélut's book, another eminent French physician, M. Lèuret, published a work on the same subject. The title of this work, "The Moral Treatment of Insanity," would lead us to expect views adverse to the somatic origin of mental disease, and such, in fact, is the case. Physicians who treat insanity with moral and penal remedies are not likely to regard its cause as a pathological condition of the organism; and, on the other hand, physicians who refuse to regard insanity as a bodily disease, and who interpret its phenomena as manifestations of a fermentation in the spiritual essence, easily and logically persuade themselves that sharp penal remedies are useful and justifiable in its treatment.

M. Lèuret certainly combats the somatic theory, and the pathological facts upon which it rests, with a logical acumen, contrasting very strongly with the manner of the author last mentioned, and even of M. Esquirol. While we entirely dissent from his conclusions, we are glad to avail ourselves of his assistance to ascertain the weak points of that doctrine which attributes insanity to cerebral change alone; a doctrine of the truth of which we are convinced, but the proofs of which it would be vain to deny require to be multiplied, confirmed, and arranged, with a care and precision which they have not yet received. M. Lèuret believes that he has established the following positions:

1st. That the authors who believe it possible to establish an anatomical change as the cause of insanity differ greatly among themselves; thus Greding asserted that thickness of the bones of the cranium occurs in 77 out of 100 patients; while Haslam found this condition in 10 only out of 100 patients. Hyperæmia of the brain is recorded by Parchappe in 42 cases out of 109; and by Bertoleni only in 14 out of 100.

2dly. That some of the cerebral alterations (to which insanity is attributed) are by no means well established. Thus, in the cases which are cited of hypertrophy of the brain, it ought to have been established that this was not owing to fullness of its vessels, or to the presence of a serosity in its tissue. These observations have not been made. Again, that which is called a dense brain, or a soft brain, expresses nothing distinctly except in extreme cases.

3dly. That the value attributed to certain alterations is deduced from a number of observations by far too small, so that one result frequently invalidates another; thus M. Parchappe has deduced the average normal weight of the healthy brain from thirteen observations on men, and nine upon women, and upon this average he establishes the rule for atrophy of the brain. This average is evidently too small, and indeed M. Parchappe gives different averages elsewhere.

4thly. That the [pathological] alterations referred to insanity, are met with in patients who have never been insane.

5thly. That all authors confess that there are insane persons, in whose brains no pathological changes are found.

6thly. That the lesions which are frequently met with among the insanes, to which any value can be attached, are only met with in cases in which insanity has been complicated with paralysis; and that in order to decide if any lesion is the cause of insanity, it is at least necessary to find it in a case of simple mental aberration in which there has been no reflection of emotion or sensibility.

That such an opponent of the somatic theory as M. Léuret undoubtedly is, should have been compelled to rest his argument upon no better foundations than those above named, appears to afford strong presumptive evidence of the truth of that theory. I shall make some brief remarks upon each of his objections.

1st. That authors should differ so greatly in their numerical estimates. M. Léuret has shown them to have done, can prove no more than that authors have been inexact in their observations, or careless and untrustworthy in recording them. The objection may to some extent be valid against the value of statistics in pathological science. It may show that one author counted slight appearances of change, while another only recorded extreme instances; but it can in no way diminish from the value of the fact, that all the authors cited did observe the pathological changes they record in a certain number of cases.

2dly. That pathological changes of the brain need to be observed.

these forms of insanity, because they are neither constant nor exclusive, and they do not make themselves apparent except in an advanced period of the disease." The logic by which M. Lélut arrives at these conclusions appears scarcely more reliable and consistent than the organic lesions which are, and are not, according to him, the cause or the condition of insanity. Inflammatory lesions of the brain are, according to him, very near being the cause of acute insanity; but they are not the cause, because insanity may destroy life without producing them. Chronic inflammations also are very near being the cause of chronic insanity, (*les conditions du cerveau qui si rapproche le plus de leur cause prochaine*), but yet they are not the proximate cause because they only make themselves obvious after a while.

Some years subsequently to the publication of M. Lélut's book, another eminent French physician, M. Lèuret, published a work on the same subject. The title of this work, "The Moral Treatment of Insanity," would lead us to expect views adverse to the somatic origin of mental disease, and such, in fact, is the case. Physicians who treat insanity with moral and penal remedies are not likely to regard its cause as a pathological condition of the organism; and, on the other hand, physicians who refuse to regard insanity as a bodily disease, and who interpret its phenomena as manifestations of a fermentation in the spiritual essence, easily and logically persuade themselves that sharp penal remedies are useful and justifiable in its treatment.

M. Lèuret certainly combats the somatic theory, and the pathological facts upon which it rests, with a logical acumen, contrasting very strongly with the manner of the author last mentioned, and even of M. Esquirol. While we entirely dissent from his conclusions, we are glad to avail ourselves of his assistance to ascertain the weak points of that doctrine which attributes insanity to cerebral change alone; a doctrine of the truth of which we are convinced, but the proofs of which it would be vain to deny require to be multiplied, confirmed, and arranged, with a care and precision which they have not yet received. M. Lèuret believes that he has established the following positions:

1st. That the authors who believe it possible to establish an anatomical change as the cause of insanity differ greatly among themselves; thus Greding asserted that thickness of the bones of the cranium occurs in 77 out of 100 patients; while Haslam found this condition in 10 only out of 100 patients. Hyperæmia of the brain is recorded by Parchappe in 42 cases out of 109; and by Bertoloni only in 14 out of 100.

2dly. That some of the cerebral alterations (to which insanity is attributed) are by no means well established. Thus, in the cases which are cited of hypertrophy of the brain, it ought to have been established that this was not owing to fullness of its vessels, or to the presence of a serosity in its tissue. These observations have not been made. Again, that which is called a dense brain, or a soft brain, expresses nothing distinctly, except in extreme cases.

3dly. That the value attributed to certain alterations is deduced from a number of observations by far too small, so that one result frequently invalidates another; thus M. Parchappe has deduced the average normal weight of the healthy brain from thirteen observations on men, and nine upon women, and upon this average he establishes the rule for atrophy of the brain. This average is evidently too small, and indeed M. Parchappe gives different averages elsewhere.

4thly. That the pathological alterations referred to insanity, are met with in patients who have never been insane.

5thly. That all authors confess that there are insane persons in whose brains no pathological changes are found.

6thly. That the lesions which are frequently met with among the insanes to which any value can be attached, are only met with in cases in which insanity has been complicated with paralysis; and that in order to decide if any lesion is the cause of insanity, it is at least necessary to find it in a case of simple mental aberration in which there has been no affection of motion or sensibility.

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with greater exactness than heretofore is undoubtedly true. They have, however, been observed with greater exactitude than M. Lèuret admits; for instance, in the case he cites, hypertrophy, it is well established that in this rare condition the brain is paler and dryer than usual, and that the increase in its volume cannot be attributed to fullness of the vessels or serous infiltration.

3dly. This objection again applies to the statistical method of proof, as it is too frequently used. It applies, however, to the abuse of this method, in all departments of pathological science. Doubtless, those who count observations without estimating them as recommended by Morgagni, misuse the numerical method in their deductions upon all diseases, insanity included.

4thly. If M. Lèuret can show that serious pathological change in the cortical substance of the convolutions has existed in persons whose mental functions have never been affected, he will go far to upset the pathological nature of insanity, but this he has not done, nor in my opinion is he likely to do. That some pathological changes which are observed in insane persons, but which are non-essential to insanity, should occur also in persons who have always been sane, is a fact of no value in the present discussion.

5thly. That in the brains of some insane persons no pathological changes are observed, is undeniable; but would it not in these cases be more philosophical to doubt with M. Portal, the sufficiency of our powers of observation, than to use it as an argument against the existence of all pathological change of an organ whose functions are perverted, but whose structure is not obviously injured. Is M. Lèuret able to point out the pathological changes which cause neuralgia, tetanus, chorea, or hysteria, or that by which life is destroyed from a blow on the epigastrium, or concussion of the brain? Deficient information should lead us to seek for more light, and should by no means induce us to veil that which we possess.

6thly. M. Lèuret certainly mistakes the fact, when he affirms that cerebral lesions are only found in those who are paralyzed. The lesions peculiar to the different forms of ordinary paralysis are by no means well ascertained, and yet no one doubts that paralysis is always occasioned by lesion of the nervous system, while the conditions of the brain which are found in general paralysis, are not as yet better understood than those which occur in simple mania or acute delirium. Moreover, whatever doubt may hang over the primary pathological

changes which attend the earlier stages of simple mental aberration, there can be no doubt whatever that the secondary conditions which attend the chronic stages of simple insanity, uncomplicated with paralysis, are obvious and undeniable in degraded nutrition and atrophy of the cerebral organ.

I have stated M. Lèuret's objections, and have answered them at some length, for I must pay him the compliment of considering him the most formidable antagonist of the pathological view of insanity. He has stated his reasons for the opinions he entertains, with precision and candor, and he has thus afforded an opportunity of answering them, an opportunity which would be sought in vain in the crude opinions upon this point expressed by Pinel, and even by Esquirol, and Georget.

M. Guislain, the able leader of psychology in Belgium, reduces the lesions of the brain found in insanity under nine heads: 1st, a state of sanguineous congestion of the meninges, the brain, or the two together; 2dly, a state of serous congestion of the above; 3dly, cerebral softening; 4thly, opacity and thickness of the arachnoid; 5thly, adhesions of the membranes to each other, or to the brain; 6thly, cerebral induration; 7thly, cerebral hypertrophy; 8thly, cerebral atrophy; 9thly, vices of conformation of the brain and of the skull.

These conditions are, he thinks, in a practical point of view, capable of being reduced to four fundamental alterations: sanguineous congestion, serous congestion, softening, and induration. It is open to doubt, however, whether the three latter of these alterations can be considered fundamental; and it is certain that the four do not include all the conditions which may be considered fundamental. He does not include those aberrations of nutrition known under the names of inflammatory, atrophic, and anemic.

That M. Guislain admits the existence of such conditions in abundantly evident from the pages that follow. At page 367, *Lçons Orales*, *tome*, he attributes to the state of congestion, not only ecchymoses of the arachnoid and pia-mater, but false membranes, and a red appearance of the arachnoid, "having the aspect of an inflamed conjunctiva."

Such an appearance, and especially the existence of false membranes, cannot be attributed to a state of congestion, and should have induced this able physician to have admitted the inflammatory, at least, as one of the fundamental states of the brain in insanity.

He estimates that in one-fourth of the bodies of persons dying insane, there is a congestional state of the encephalic mass; but he

declares his opinion that this proportion is far from that which obtains among the living insane, and that the majority of those who are cured have never had congestion of the head in a notable degree.

M. Guislain says, "The brain and its membranes may have been congested without the existence of a state which can be called inflammatory. If inflammation was always a condition of congestion, would one see the numerous cures which take place among sanguine and robust maniacs, who offer in the course of their disease those symptoms, which one often considers to be inflammatory, and which are really only a vascular orgasm, and not a state of phlegmasia. Broussais himself felt this in giving to this condition the name of sub-inflammatory. It is an afflux of blood, which may in a manner be compared to that injection of the cheeks which accompanies shame and modesty; that injection which makes itself evident in the eyes, over the whole of the face, the neck, and even over the breast of a man agitated by violent anger."

It is evident, however, that a much more profound and serious change exists in the blood-vessels of the insane brain, than in the transitory blush of modesty or suffusion of passion. These states are psychological, and leave behind them no tendency to destructive change. The state of the congested brain in insanity is pathological, and tends to pass into a state of structural change, respecting the wide deviation of which from a state of health there can be no doubt.

M. Guislain has himself gone further than most writers on this point, in representing by means of wood-cuts the microscopic appearances of change in the congestionary state of mania, in the fatty degeneration following mania, and in congestion with and without softening.

I have been unable to verify the accuracy of these representations, but I firmly believe, that my want of success in recognizing the microscopic character of the cerebral changes which result from hyperemic conditions of the brain, has for its sole cause the limits which bound our powers of observation, arising from the want of power in the organs of sense and their mechanical aids. If the congestion of insanity were of the character which M. Guislain attempts to attribute to it, insanity might be as transient as passion, or passion would be as dangerous as insanity.

The most careful and elaborate investigations into the pathological anatomy of insanity made in France, are, without doubt, those made

by *M. Parchappe*, the present Inspector General of Asylums in that country. His first work on the different alterations of the brain in insanity, was published in 1838. *M. Parchappe* commences by admitting fully, "That there is no single pathological alteration which can be proved to exist in all cases of insanity; but there are three which have been found in the majority of cases. This is a result which might have been expected. The pathologists who have searched for one essential characteristic pathological change, might have saved themselves a deception. * * * The point which one may reasonably hope to obtain, is to be able to distinguish among cases of mental disease those kinds which are characterized both by the constancy of the symptoms, and by that of pathological change." The uncertain existence of pathological alterations in insanity, and the occasional absence of all change disprove, indeed, the theories of those who attribute insanity to some exclusive pathological condition of the brain, for instance, to chronic meningitis, or to induration of the brain, but they do not prove that these alterations are, as asserted by *Esquirol*, *Léuret*, and others, mere complications or consequences of the malady. The alterations which exist in simple inflammation of the brain and its membranes, are not those which are found in insanity. Those which are found in insanity may be distinguished into, 1st, those which may be considered accidental; 2nd, those which existing in other maladies, yet appear to play a part in the production of insanity, and, 3rd, those which are believed to be essential to mental alienation. Among the first may be enumerated cerebral hemorrhages, partial softening of the white substance, disease of the cerebral arteries; and among the second, thickening and opacity of the arachnoid, hyperæmia of the pia-mater and of the brain, serous infiltration of the pia-mater, dropsy of the arachnoid cavity. In the important last division, *M. Parchappe* includes the following changes,—sub-arachnoid ecchymosis, and partial punctiform injection of the cortical surface with or without softening, extended softening of the middle portion of the cortical substance, adhesion of the pia-mater to the surface of the brain; rose, lilac, and violet colored, discolorations of the cortical substance, loss of color of the cortical substance, atrophy of the convolutions, induration of the brain. *M. Parchappe* believes that he is able to establish the following classification of mental disease upon the pathological changes which he has observed. 1st. *Monomania*; in this form of insanity, no pathological change is found to exist in the brain, and the probable cause is

to be sought in the organic predominance of some portion of the brain in consequence of its size or activity. 2nd. Acute Mania and acute Melancholy; in these forms of insanity, the alterations found in the brain, to a certain extent resemble those of inflammatory affections of the organ. They are hyperæmia of the pia-mater and of the cortical substance, partial injections of the sub-arachnoid tissue, punctiform injection, and occasional softening of the cortical substance; it is rare that the meninges are found extensively thick and opaque. The above alterations are usually more decided in acute melancholia than in acute mania. In sympathetic mania, that is, in mania occasioned by the irritation of some part of the distal nervous system, no anatomical changes may be discovered if the examination is made during the early period of the disease, but after a while, the brain passes from the state of physiological excitement into that of pathological change, and then the above alterations may be expected to be found on examination. 3rd. Simple chronic mania; in this form of insanity, the aspects of the brain are altogether different from those which prevail in the acute paralytic forms of insanity; they are, atrophy of the convolutions, with loss of color and induration of the cortical substance, or of the medullary substance, or of both; serous infiltration of the pia-mater, and dropsy of the ventricles, connected with and consequent upon general atrophy of the brain. 4th. Paralytic insanity, (general paralysis.) In this the essential alteration consists in softening of the middle layer of the cortical substance; very frequently also the pia-mater is thickened, adherent and infiltrated; in the acute form the cortical substance is hyperæmic and deepened in color, and the pathological appearances of acute mania are present. In the chronic form, the cortical substance has lost color and become thin; atrophy of the convolutions, and the appearances of chronic mania are present. 5th. Epileptic insanity; in this the alterations resemble those of simple chronic mania.

In 1841, *M. Parchappe* published his "Theoretical and Practical Treatise on Insanity," a work more fully devoted to necroscopic record than "Andral's Clinique" or "Lallemand's Letters." *M. Parchappe* attempts to establish his deductions by the numerical method; and in this we think he has fallen into an error: first, because the number of cases upon which he founds his averages are, under some heads, insufficient to establish a trustworthy average; and secondly, because he has in several instances adopted methods of comparison, which are much open to objection. The manner in which he arrives at an esti-

mate of cerebral atrophy is objectionable on account of both of the reasons above given. He founds his estimate upon a comparison between the weight of the brain examined, and the average weight of healthy brains. Now it is evident that if the diseased brain was originally heavier than the average, a considerable atrophy might not be shown by a comparison of this kind. An atrophied brain of large size may still be heavier than the average of healthy brains.

Indeed, an excellent English pathologist, Dr. Boyd, has inferred from averages much larger than those of M. Parchappe, that the average weight of the insane is actually greater than that of the sane brain. Dr. Boyd's result, however, is open to the same objection as that which I have made to M. Parchappe's. He appears to have compared the healthy brain of metropolitan paupers with the insane brain of lunatics who have resided in the country. Now it is possible, nay probable, that the cerebral average of healthy brains in Somersetshire and in Marylebone Workhouse, may differ to a greater extent than the average weight of the sane brain differs from that of the insane organ. The stunted growth of metropolitan paupers may have a greater influence upon the average weight of the cerebral mass than the influences of disease.

M. Parchappe's average weight of the sane brain may have been deduced from average individuals; but he could make no selection of this kind for the other side of the comparison. The insane person whose brain has to be examined and compared, may have been a well developed man, with all the organs above the average size, or with a brain originally large or small in comparison with the rest of his body. So true is the addition which Morgagni made to the dogma of Hoffman, "*Ars medica totum observationibus.*" Morgagni wrote, "*sed perpendendæ sunt non numerandæ observationes.*"

Moreover, the number of observations upon which M. Parchappe has founded his average of the weight of healthy brains is clearly insufficient for the purpose, being only thirteen for men and nine for women. From numbers so small it is impossible to avoid accidental errors and disturbances.

The comparison of an atrophied brain with a supposed standard of weight, was the best method which suggested itself to M. Parchappe for the purpose of establishing the fact of atrophy. Since, however, I have devised a method by means of which the actual bulk of the diseased organ can be compared with that of the sane individual organ

when it was in a state of healthy nutrition, all methods of estimating its loss of substance by means of weight which take no cognizance of specific gravity, or by comparison with averages, must be superseded.

In the *resumé* upon 38 autopsies of persons dying in the acute stage of mania and melancholia, M. Parchappe (p. 45.) affirms the same principles which he has enunciated in his former work, especially the absence of any essential and exclusive encephalic alteration. He affirms, moreover, that the defections prove the existence of an analogy as strong as possible, if not perfect, between the cerebral alterations found after acute mania and those of acute melancholia; and therefore he concludes that the distinction between these two states is not justified upon pathological grounds.

The 38 examinations afford the following *resumé*: In 36 the brain was the seat of hyperæmia, either in the periphery, its membranes, or its substance; in 7 instances the hyperæmia was simple; in 29 it assumed the form of subarachnoid ecchymoses; in 23 instances there were subarachnoid ecchymoses, with punctiform injection of the cerebral surface; and in 17 of the latter there was also softening of this surface. Sixteen times the cortical substance was reddened in colour. In one case there was no apparent encephalic alteration whatever, and in several the alterations were inconsiderable. It is needful, therefore, to admit that the pathological condition of acute insanity is of such a nature that it is possible for it to leave no *post-mortem* appearance. Taken singly, none of the alterations described can be held to express a pathological state of the brain, which corresponds to the abnormal psychological manifestations; but examined collectively, these alterations afford an idea of the pathological character which must be attributed to that state, namely, that of hyperæmia. This condition was only absent in two cases out of the whole thirty-eight, and it is very probable that hyperæmia also existed during life, even in the two cases in which there was no trace of it after death. The thickening of the meninges and the superficial softening of the cortical substance, which are so frequently found, indicate that this hyperæmia is not that of simple congestion, but that of active congestion.

"A legitimate induction may therefore be derived from the facts, to the effect that there is in general during life an active sanguineous congestion of the brain co-existing with the symptomatic phenomena of acute insanity." "One may even recognise, up to a certain point, a relation between the intensity of the symptoms during life, and the extent of the alterations after death."

Of chronic insanity M. Parchappe details the appearances of one hundred and twenty-two cases, which may be summed up as follows : In seven instances there were no alterations, or almost none ; in eleven instances the alterations were simply hyperæmic ; in five the two substances were softened ; twice there was induration of the cortical substance alone ; eight times there was induration of the white substance alone ; twenty times there was induration of the two substances ; sixty-one times there was atrophy of the cerebral convolutions ; sixty-four times there was hyperæmia, which was simple in forty-six cases, and in eighteen combined with ecchymoses, and in two cases with injection and softening of the cortical substance. This substance was colored red five times. It was deprived of its [normal?] color fifty-nine times.

It is evident, says M. Parchappe, from these facts, that there is no essential and characteristic pathological appearance in chronic insanity. There may be no trace of pathological change after death, or only an unimportant one of simple hyperæmia. But the alterations are remarkably different from those which belong to acute insanity. In the latter, the predominant alterations are hyperæmic conditions, with arachnoid ecchymoses, injection and softening of the cortical substance. In chronic insanity the predominant alterations are atrophy of the convolutions, and induration of the two substances. "The symptomatic differences in the two forms of insanity correspond generally with the pathological differences in the organ of intelligence." In chronic insanity the predominant state is pathologically opposed to the hyperæmic condition of acute insanity, and the atrophy of the convolutions especially expresses a movement of the plastic force opposed to that which represents active hyperæmia. "The predominant alterations in chronic insanity express in general, a state of diminution of the plastic activity ; a state diametrically opposed to that expressed by the predominant alteration in acute insanity, which has been shown to be active sanguineous congestion, representing the physiological principle at the highest point of plastic activity. And these conditions of the organism coincide with the psychical symptoms peculiar to the two forms of disease which present two "opposed dynamical states, the one in which the psychical activity is in a plus, and the other in which it is in a minus condition."

M. Parchappe concludes his valuable treatise with a chapter upon the appearances of the healthy brain. From an early period of his investigations, he had instituted comparative examinations of

sane and insane brains, having both before his eyes at the same moment.

"I have thus been able to assure myself how inexact is the assertion frequently made, that between two brains of this kind, it is absolutely impossible to distinguish that which belongs to insanity. The contrary assertion would be much nearer to the truth, especially if one did not make it without some restriction. In regard to paralytic insanity, at least, it may be said, that the difference strikes the eye, and can only be mistaken by prejudice or inattention."

He sums up the characteristic appearances of the sane brain as follows: "Extreme tenuity and perfect transparency of the arachnoid, and of the pia-mater. Absence of sub-arachnoid serous infiltration. The membranes may be detached from the convolutions without producing decortication. When the cortical substance is soft, and the membranes begin to become dry, it may happen, that in circumscribed points they detach with themselves flocculi, and even small plates of the cortical substance. The cortical substance is of a grey color, of which the shade varies a little in different individuals, and in the same individual in different parts of the thickness of the substance. To the naked eye, the shade of the surface does not appear paler than that of the deeper parts. The internal portion is, perhaps, a little deeper in color, and between the two we can sometimes distinguish an intermediate shading, paler than either. The medullary substance is of a pure and striking whiteness. The consistence of both substances is considerable when the death has been recent and the temperature moderate. The white substance is rather more firm than the grey. The surface of the ventricular membrane is smooth and brilliant, sometimes offering very fine granulations. The cut surface of the white substance is sometimes dotted with a small number of red points. Under the influence of the air, the blood in the vessels becomes more brilliantly red, and the cortical substance takes on a rosy tint, which gradually becomes deeper, but which never attains the intensity which characterizes pathological alteration of color of this substance. The influence of time and a high temperature produces softening and commencing putrefaction, and causes the detachment of flocculi with the membranes, like that produced by drying of the membranes from contact with air. The convolutions are pressed together, only offering space for imbedding of the pia-mater. When the membranes are removed they still touch, and if separated, their return to their apposition on account of their

elasticity, and the anfractuosities efface themselves. The thickness of the cortical substance varied in the anterior lobes from two to three millimeters, and on the convexity, and at the base, from two and a half millimeters to five."

The eminent author I have here freely quoted, has done excellent service in the cause of a rational pathology of mental disease. He has excluded all speculative hypothesis upon the nature of mind and its aberrations, and has set a worthy example to his successors, in the careful and laborious manner in which he has observed and recorded the facts upon which alone any trustworthy knowledge in this, as in all other departments of science can be founded. I am far from agreeing with all the conclusions at which M. Parchappe has arrived, but to the spirit of his enquiries, and to his general results, I give my hearty adherence. These results, however, require to be accepted with large limitations and exceptions; and, as I hope hereafter to prove, large additions to them must also be made to present a correct general idea of mental pathology. It is, however, no small praise to an author to affirm, as may with truth be done of M. Parchappe, that no candid investigation, even into his errors and deficiencies, can be made without advancing the science of which he treats.

The principal error into which M. Parchappe has fallen, is that of having made so abrupt a classification of insanity, into acute, and chronic. The phenomena of the disease by no means justify a distinction of this kind so sharp as to lead to M. Parchappe's assertion, that the two forms of the disease present pathological conditions essentially opposed to each other. Doubtless the pathological appearances presented in a typical case of each form, will sometimes contrast with each other as remarkably as he insists; but a large proportion of cases of mania and melancholia are chronic from the first, and a large proportion of cases which are unquestionably chronic in point of duration, present at intervals, all the symptoms of acute disease, and after death present an intermixture of those pathological conditions which M. Parchappe has described as opposed to each other from their very nature. Nothing is more common than for an atrophied brain to suffer from temporary hyperæmia. It is a pathological law, that injured and ill-nourished organisms are liable to sudden congestions, almost in proportion to the amount of deficiency in their nutrition. Hyperæmia is moreover peculiarly liable to take place in the atrophied brain in consequence of the loss of external support which the organ has sustained by shrinking

away from the cranium. The lengthened, tortuous, and dilated vessels of the pia-mater in atrophied brains, indicate the frequency with which they have been in a hyperæmic state.

It is not often that persons suffering from simple recent mania or melancholia, die from the effects of the disease. The form of mental disease which destroys life in the early period of its course is comparatively rare, and has been thought by many modern writers to be a distinct form. The French alienists of the present day, call it *Délire aigu*, and distinguish it from recent mania and recent melancholia. In the brains of persons who have died while suffering from this form of insanity, the strongly marked characteristics of hyperæmia of the substance, and the membranes, even to the sub-arachnoid ecchymosis described by M. Parchappe, undoubtedly exist. But it is by no means so certain that in the recent cases of mania and melancholia of most frequent occurrence, if death were to occur from some accidental cause, or intercurrent disease, which did not interfere with the state of the cerebral circulation, it is by no means so certain that strongly marked signs of hyperæmia would be found to exist. In many cases of recent mania indeed, a condition of the brain the very opposite of hyperæmia is known to be the condition of disease, both by the nature of the cause, the effects of remedies, and the *post-mortem* appearances when chance has afforded an opportunity for their observation. The fact, that all the symptoms of acute mania frequently arise, and continue throughout the course of an exhausting bodily disease, which leaves every individual organ, the brain included, in an ill-nourished and anemic state, affords irresistible evidence that the phenomena of acute insanity must in many cases co-exist with a state of the cerebral organ, the very reverse of hyperæmic. The rapid formation of ideas is so remarkable a symptom in acute insanity, that M. Parchappe, in common with M. Falret and others considers it a proof that the psychical activity is in a state of exaltation; and he logically enough infers that the plastic activity of the organ of which psychical activity is the function, must also be in a state of exaltation, or, as he expresses it, in a plus state. This however, is not unconditionally true. Doubtless in some cases, and for a short time, active hyperæmia of the brain, producing a rapid nutrition and decomposition of its substance, and accompanied by quick-flowing ideas and fancies, may be the condition of acute mania, as it is the condition of cerebral excitement in the early stage of intoxication. But it is an error to suppose that a rapid flow of ideas is always a sign of that

psychical activity which depends upon an exalted state of cerebral nutrition. There is an ideal activity which resembles palpitation of the heart from weakness; and ideas frequently flow through a debilitated brain in rapid succession, because the mental impression made by each of them is feeble and unsuggestive. Doubtless they follow a certain train, but this is of the most desultory kind, because the organ answers to the faintest touch. The Germans have a curious term for this impressive and remarkable symptom. They call it *ideenjagd*, idea-hunt. It is a hunt in which there is nothing hunted; or, like the chase of the ocean billows, where the old are ever vanishing and the new arising, without evident purpose or end.

“Ac veluti ventis agitantibus aquora, non est

Æqualis rabies continuusque furor.

Sed modo subsidunt, intermissique silescent;

Vimque putes illos deposuisse suam.”

Dementia, moreover, is oftentimes acute as regards its duration. No disease is so various, and so fruitful in exceptions and apparent anomalies to all rule as insanity; no other organ being exposed to such a variety of influences, combining and interfering with each other in every possible degree, as the brain. Pathologically, however, two states of the brain, and two classes of phenomena dependent upon those states, may in many instances be distinguished, namely, in the first place, the pathological state, upon which the early phenomena of the disease depend, whether this be hyperæmia, mania, toxæmia, or some other state; and in the second place, those conditions of the brain which are consecutive upon and the results of the former conditions, secondary conditions which, in some cases, may be those of shrinking or atrophy—in others, those of hardening, sclerosis—in others, softening—in all, some degree or kind of nutritive degeneration, expressed by tissue-change into fat, or the deposition of serum. Pathologically, this distinction is, in a considerable number of instances, as well founded as the distinction of congestive kidney from the atrophied kidney which follows, or the sub-inflammatory condition of the liver from the atrophic cirrhosis. The passage from the primary to the secondary state can not, indeed, be proved to have taken place in the brain as in other organs, because the primary state is often of a nature to escape our observation. That, however, a primary pathological state did exist even in those instances where no appearances thereof could be discovered by *post-mortem* examination, is in the high-

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est degree probable, from the circumstance that in instances in which the early manifestations of the disease have been of a similar kind, the chronic appearances of the brain have afforded unquestionable testimony of profound pathological lesion. Monomania has been supposed to be unattended by changes in the brain appreciable by our senses. This is generally true, in the early parts of the disease; but the brains of persons who have been monomaniacal for many years frequently present unmistakable evidence of degraded nutrition. It may, indeed, be said that some allowance must be made for the disuse of the cerebral functions, which takes place in many instances of partial insanity, the mind becoming, as a whole, completely inactive, in consequence of the predominance of some delusions. The influence of a fixed idea upon the mental activity is certainly a curious and important question. In some instances a fixed idea petrifies the mind, and it is then no wonder that its organ is badly nourished, like the disused arm of a self-tormenting fakir. But the possibility of an idea arresting mental activity to the extent of producing cerebral atrophy, could only exist in a diseased organ. No amount of healthy pre-occupation, or of mental indolence in a physiological condition of the organ, ever produced such a result.

Much has been written upon the urgent necessity of distinguishing, with care and exactness, those appearances in the brain which have been the cause of, and those which have been caused by the mental disease. "It is particularly necessary here that the *post*, the *cum*, and the *propter* should be carefully distinguished," says Feuchtersleben; and many authors have not hesitated to repudiate the evidence of their own senses, that mental disease was occasioned by cerebral change, under the shallow and absurd plea that the changes they saw in the brains of the dead insane were not the causes, but the consequences of the insanity.

The objection that cerebral change is not the cause of insanity may be true, but in a sense very different from that used by these writers. Organic change is not the cause, but the condition of disease. The real causative agent is the event which induces the organic change. All that we know of causation is an invariable linking together of consecutive events. This chain in the production of insanity stands thus: a blow on the head, followed contemporaneously by an organic change in the brain and the phenomena of perverted mental function. The first link used to be called the remote cause—the second, the proxi-

mate cause of disease. It is now agreed, however, to designate the first agencies only as causes, and the organic changes resulting from them as the conditions of disease.

It is true that in the course of brain disease the philosophical figment of the *vis medicatrix* finds little support, and that the progress of events too frequently leads in the direction of increasing injury and progressive decay. A morbid condition of the organ gives rise to the phenomena of mental excitement. These phenomena are themselves the occasion of an increased waste of tissue, and of vascular congestion, and other morbid conditions of the organ. This, however, is only what occurs in many other diseases. In bronchitis, for instance, the difficulty of breathing and the cough increase the bronchial inflammation; and it would be as correct to affirm that the morbid changes found after death in this disease are caused by difficulty of breathing and cough, as to affirm that the morbid changes found in the brains of lunatics are occasioned by passion, excitement, and other phenomena of mental disease. The simple facts, as they relate not only to the brain, but also to all the organs of the body, are that, from some cause or other, a morbid condition of the organism is occasioned. This condition is attended by abnormal states of the functions of the organ, which in some instances afford facility to the organ for the recovery of its healthy state; for instance, when the stomach is deranged by noxious ingesta to a degree which impairs the appetite, repose of function is afforded, which restores its power and tone. Such instances are referred to under the euphonious title of the *vis medicatrix nature*. But in other instances injury to the organism does not give rise to phenomena of function having this curative tendency. On the contrary it occasions abnormal states of function, which perpetuate and increase the morbid conditions of the organism. This ought to be called the *vis exitialis nature*, were not physicians too complimentary to nature to admit, in explicit terms, that she is capable of exercising an influence in any way pernicious.

In diseases of the brain affecting the mind, the functional phenomena are rarely of the conservative, and frequently of the injurious and destructive character here referred to. Morbid conditions of the brain occasion abnormal states of the mental functions, excitement of emotion and instinct, accompanied by loss of rest, increase of degenerative change, and diminished repair, which result in exaggeration of the diseased conditions of the organ, which conditions may to this extent, and

to this only, be considered as occasioned by them. The exact view is, that disease of the brain is not a stationary, but an ever-changing condition; that the actual state of the organ at any one moment is the result of its state in the previous moment, and the occasion of its state in the following moment; and that the morbid appearances which are finally observed are in no instances immediately produced by the cause which set these changes in motion, but are the visible expression of the last change which took place in the diseased organism. So that, in fact, the actual condition of diseased brain at any moment, is unlike its condition at any other moment; and inasmuch as insanity is a disease rarely fatal in its early stages, it would, *a priori*, be probable that the appearances observed in the brains of deceased lunatics should widely differ from those occasioned by the immediate application of the remote cause, which would be seen, were it possible to observe the state of the organ at an early period after the application of the cause. There is no doubt, in fact, that the morbid conditions observed in the brains of lunatics differ as greatly from those which result immediately from the agency of the causes of mental disease, as hobnail liver differs from hepatic congestion.

I shall now sketch the most frequent anomalies of appearance and organization which I have myself found in the dissection of the bodies of the insane.

On making the examination, it is well to note the size of the bony frame, measured by the length of the body and its breadth across the shoulders and hips. This affords a much better standard with which to compare the size of the head, and the weight of the brain, than that afforded by the weight of the body, which has been adopted for this purpose by some pathologists. The weight varies so greatly between the obesity of dementia and the emaciation of mania and melancholia, that the standard it affords is most untrustworthy.

Careful observation, however, should be made of the state of emaciation or obesity; also of any bruises or bruise-like marks; any bed-sores or deformities. The features after death generally lose all expression characteristic of mental disease. The examiner is frequently surprised at the regularity of feature and placidity of expression, in countenances which, to the last hours of life, had been disfigured by the peculiarities of insane physiognomy. Even the heavy and relaxed features of general paralysis are braced up after death, and return to their normal expression. Often have I felt that I have never seen the

same expression of a patient's face until after his death. The dimensions and form of the head should be noted. Although I believe that the average dimensions of the head are below those of the sane, when the comparison is obtained by the examination of large numbers, still in a great number of instances they will be found to be good, and, indeed, the head is frequently not only large, but phrenologically well shaped.

I am not aware in what proportion of the sane the shape of the head is peculiar, since it is rare that opportunities occur for making the observation among them; but among the insane a considerable proportion present decided peculiarities in the shape of the cranium. The most frequent peculiarity is a want of symmetry in the two sides. One side is rather smaller or flatter than the other; or the whole cranium is pushed over a little to one side; or one side of it is a little more forward than the other; or the two anomalies co-exist, giving the cranium a sort of twisted appearance. These things will not be seen unless they are carefully looked for, with accurate and careful eyes, upon the shaven scalp.

Sometimes the skull is high and dome-like—more frequently it is as if it had been compressed laterally, and elongated from before backwards, keel-shaped, in fact, like the skulls figured by Dr. Minchin, in which the centres of ossification of the parietal bones are increased in number. Sometimes the forehead is preternaturally flat, narrow, or receding, or very large and bulging, or the occipital region is deficient, and the back of the head rises in a straight line with the nape of the neck. Sometimes the skull has a remarkably square configuration. The square and carinated form of skull I have seen most frequently in connection with mania. The dome-like and high vertical skull, and also the unsymmetrical skull, most frequently in melancholia. In mania the anterior cranium is more frequently of good shape and size than in melancholia. In the latter the forehead is often small and mean, but sometimes it is disproportionately large and globose. The shape of the head indicated by the rules of phrenologists, can only faintly be expected to coincide with the mental symptoms in those somewhat rare instances in which insanity is the mere development in excess of natural character; and in some such instances I have found the shape of the head tally in its general outline with the indications of phrenology. Occasionally depressions are found in the outer skull, which some-

times do and sometimes do not correspond with the bulging of the inner table of cranium. When they do not so correspond, I have found that they indicate a local absorption of the diploe.

It is an interesting question, how far the shape of the skull alters in insanity. If the forehead expands, even in mature age, under the influence of intellectual development, it is likely that it will contract under the influence of intellectual decay. Some writers have asserted that the shrinking of the brain in atrophy is commonly, and to a considerable extent followed, and the cranium filled, by a flattening and shrinking of the cranial bones. (See Paget's *Lectures on Pathology*.)

Rokitansky also affirms that atrophy of the brain frequently gives rise to deposit of bone on the inner table of the skull, especially about the anterior convolutions.

I have not satisfied myself that the increased thickness of the cranium which is frequently met with in the insane, is in any way connected with atrophy of the brain. Some of the thickest and heaviest craniums which I have met with have occurred in instances in which there was little or no cerebral atrophy; and the condition of the cranium where there is undoubted atrophy of the brain, is as frequently one of abnormal tenuity as one of abnormal thickness.

In pursuing the examination the state of the ears and of the scalp should not be forgotten. The sanguineous tumor of the ears peculiar to the insane, and the shrinking of this appendage consequent upon such tumor, are noteworthy objects of attention. These tumors, for the most part, occur in the worst and most hopeless cases; but it is an error to suppose, as some authors have done, that they occur in such cases only. I have not only seen patients recover after the ear has been shriveled up by the contraction after sanguineous tumor, but I have seen several patients laboring under quite recent insanity, in whom a shriveled ear led to the information that a curable attack had been undergone many years previously—an attack which had been followed by perfect mental sanity of considerable duration.

The scalp is sometimes full of blood, sometimes marked with scars or contusions, telling of blows and falls. In old cases of mania it is sometimes remarkably loose upon the cranium.

The cranium itself is frequently altered from its normal condition. When thicker and heavier than usual, it is also soft and full of blood. The eburnated cranium, which is at the same time thick, dense, and devoid of blood, is not found in the bodies of those dying insane. In

recent cases the only abnormal condition to be expected in the cranium is its discoloration from excess of blood. This is often evident, not only at the margin where it has been separated by the saw, but also through the whole extent of its inner surface, after the dura-mater has been separated. It presents a mottled, but decided discoloration from sanguineous congestion.

In chronic cases the skull cap is sometimes thicker than usual, congested with blood, and soft in its texture; sometimes thinner than usual throughout, or partially. In the latter case the thin portion usually occurs in the parietal region, in which the *diplœ* frequently disappears to such an extent that the skull becomes diaphanous. The thin diaphanous skull is met with in all stages, but most frequently in cases of very chronic mania and of dementia, in which the patient has not been subjected to temporary attacks of cerebral hyperæmia. On the other hand, the thick and heavy cranium is mostly met with in cases of chronic insanity, which have been subject to attacks of congestion or hyperæmia *e vacuo*. The cranium is often strongly marked by indentations produced by the *pacchionian* bodies. Not unfrequently, also, the *christa galli* is elongated and enlarged; and in epilepsy the protuberances of the *sella turcica* are enlarged, and the marks of the *gyri* of the convolutions are more strongly impressed, especially in the middle fossæ.

Exostoses or spiculae of bone, growing either from the vault or the base of the cranium, are exceedingly rare. In four hundred examinations of persons dying insane, including a large proportion of epileptics, I have only found a cranial exostosis in *one* instance—that of an epileptic man subject to violent attacks of mania. The dura-mater is frequently found adherent to the cranium. In old cases, indeed, it is rare to find that this membrane separates from the cranium with its usual facility in adults. The degree of adhesion which exists in chronic insanity varies from that which can scarcely be called abnormal to such a close and intimate union, that on the application of force the membrane splits into layers, rather than part from the bone, from which its fibres can not be separated except by hard scraping. In acute cases the dura-mater is sometimes discolored by sanguineous congestion.

Recent anatomists discard the old view, that the inner polished surface of the dura-mater is a reflection of the arachnoid. It certainly cannot be demonstrated by the scalpel that any serous membrane lines

the dura-mater; and the idea of a parietal arachnoid appears to have been due to the exigencies of systematical anatomy, rather than to the evidence of demonstration. I adopt the view that there is no parietal arachnoid, and that the polished surface is actually part of the dura-mater. This polished surface is not unfrequently the seat of exudative processes in the insane, although it is rare to find in this locality exudations of a true fibrinous character the results of undoubted inflammation, notwithstanding the assertion of Rokitsky, that the surface of the brain and the skull bound together by a series of successive normal and false membranes is a "termination of meningitis frequently found in mental disease, especially in cases of secondary imbecility." Notwithstanding this high authority to the contrary, I must assert, that adhesions between the cerebral arachnoid and the dura-mater are extremely rare in the bodies of persons dying insane. On the upper part of the brain I have never met with this state of things referred to by this author. The nearest approach to it I have met with in this region, has been the connexion of the dura-mater with the thickened arachnoid and pia-mater by means of several ligamentous bands, the condensed and organized remains of very moderate fibrinous exudation. In two instances, I have met with adhesion of the substance of the brain and its intervening membranes to the dura-mater along the petrous portion of the temporal bone, and in one instance, by the ridge formed by the ala of the sphenoid. It is an occurrence of much greater frequency for the polished surface of the dura-mater to be the source of an exudation not fibrinous, and not tending to contract adhesions. These exudations are very remarkable, and by different authors have been hitherto generally regarded either when much coloured with blood pigment, as instances of sanguineous effusion into what was considered the sac of the arachnoid, or as false membranes arising from arachnoidal inflammation. That instances of these latter conditions are not very unfrequent, renders it the more needful to distinguish the peculiar exudation to which I refer. It resembles a layer of red currant jelly spread over the surface of the dura-mater. On examination there appears to be an extremely fine cellular network, containing in its meshes an albuminous semi-fluid substance coloured with blood pigment. Sometimes the exudation extends to the temporo-sphenoidal fossæ. Sometimes it is confined to this locality. Virchow has quite recently announced its nature to be that of a colloid tumor, flattened into the resemblance of a false membrane by its position. I adhere to

the belief that it is an albuminous exudation, containing a small proportion of fibrin, and colored with blood pigment. Sometimes, true hæmorrhage is found on the inner surface of the dura-mater. On the appearance of this as a layer, Rokitsky observes, "those extravasations which have been supposed to be collections of blood between the serous and fibrous state of the membrane, with the exception of a few cases in which a small effusion has raised its innermost layer, must have been extravasations into the sac of the arachnoid, which, after acquiring an adhesion to the dura-mater, have become encysted;" (Vol. III. p. 323, *Sydenham Society's Translation*.)

In many instances of chronic insanity, and of recent insanity in which there had been a previous attack, I have found the dura-mater in the temporo-sphenoidal fossæ changed to an orange yellow color, not uniformly, but as if freckled. Doubtless this discoloration was due to the blood pigment of re-absorbed exudations; and it points, like the other changes so frequent in this membrane, to the frequent existence in insanity of one period during which the appendages of the brain are in an hyperæmic state prone to hæmorrhages, and to albuminous or albumino-serous exudations, colored with dissolved blood pigment. The colored exudations above referred to seem to me to bear a close resemblance to the exudations of blood-colored serum which take place between the cartilages of the ear, and to be owing to the same crasis.

Sometimes the structure of the dura-mater is found to have undergone osseous metamorphosis. I have never found this in the tentorium where the comparative anatomy of the felines would lead one most to expect it. I have, however, found it in the falx cerebri. Exostoses of the inner table of the skull probably have their origin in the dura-mater. I have only once found a true tumor of the dura-mater. This was as large as a filbert, pressed upon the pons, and was accompanied by epilepsy. Its structure was fibro-cellular, and it contained an abundant quantity of cholesterine in large plates.

The Arachnoid.—I have never found a state of undoubted inflammation presenting the appearance described by Guislain of the inflamed conjunctiva. In a few cases of acute mania and melancholia, I have observed the appearance of ramiform congestion; but it may be doubted whether this was not due to the underlying vessels of the pia-mater. Doubtless, in some cases, the hyperæmia in its capillaries amounts to actual stasis, otherwise the fibrinous false membranes, and the adhesions which are sometimes observed in it, would scarcely exist. A

frequent pathological change of this membrane found in persons dying insane is thickening and opacity. "The arachnoid tissue is opaque, dull like whey or milk, tumid and white, and it has the appearance and density of tendon." Often this change is limited to the arachnoid covering the convolutions of the vertex; sometimes it is restricted to that part of it which corresponds to the sulci, leaving the part which covers the convolutions thin and transparent. Patches, however, of very decided thickening and opacity, are occasionally found on the anterior convolutions of one or more hemispheres; the changes observed in the vertical region being rarely one-sided, or even greater on one side than on the other. What does opacity and thickening of the arachnoid indicate? According to Rokitansky, the "changes frequently discoverable in this membrane can be attributed only to congestion, or to slight and passing attacks of inflammation." "Opacity and thickening of the arachnoid are very common *post-mortem* appearances. After middle life a moderate degree of them is almost constantly found, and their absence is the exception; for at that period every one must have been exposed to repeated congestions of the brain and its inner membranes; (op. cit. p. 329.) The change here referred to as being so common is, although the same in nature, greatly less in degree than that commonly found in the bodies of persons dying insane. It is merely an opalescence as compared with decided thickening and opacity like a thin slice of the boiled white of egg. The frequently repeated congestions to which Rokitansky refers this change in the sane, exist in much greater force and frequency in the insane, and give rise to a corresponding intensity of this pathological change. It appears not to be the result of inflammation, even "of slight and passing attacks," so much as that of congestion. In nature it closely resembles those opaque patches so frequently found upon the visceral pericardium. Its character is that of albumino-fibrous deposit, which forms one link in the chain of degenerative change, which passes, according to its locality, into atheroma or into fat.

In connection with the arachnoid are the pacchionian bodies, absurdly called glands. These Rokitansky regards as granulations of the arachnoid, rarely indeed altogether absent, but depending for their development upon the same repeated congestions which render the arachnoid itself thick and opaque.

Luschka, however, has recently shown that these bodies are normal as to their existence, and pathological only as to their hypertrophy.

He calls them *arachnoidal villi*, and refers the genetic cause of their growth to "the disturbances of the circulation which attend the natural involution of the organism in old age. In consequence of the impeded motion of the blood, a modified transudation must take place which—in our ignorance, it must be confessed, of its precise nature—we regard as the principal cause of the increased amount of nutritive material with which the arachnoid is supplied." (*Weld. Sydenham Soc. Trans.* p. 352.)

Now in the insane of all ages, the pacchionian bodies are frequently found to be greatly enlarged, so as not only deeply to indent the duramater, but even to perforate it, and form for themselves reception cavities in the parietal bones along side the sagittal suture. Before the circulation has become impeded by the advance of age, they are prematurely produced in the insane by the impeded circulation of cerebral congestion, the frequent condition of mental disease.

I am not aware whether the minute anatomists of the German school make any distinction between that which they call the *ependyma* of the lateral ventricles and the arachnoid membrane in this locality. This ependyma, which is the seat of those puzzling bodies, the amylaceous corpuscles, is described by Virchow as the uppermost layer of the fine connective tissue which binds together the foundation masses of the brain. Be this and the arachnoid of the ventricles synonymous or not, it is certain that the walls of the lateral ventricles present in chronic insanity, and especially in general paralysis, a peculiar and frequent change. They appear to be covered with fine sand, or rather to be converted into the resemblance of fine shagreen, a change due to a nodulated deposit of fibro-albumen.

The arachnoid of the ventricles also becomes more thick, dense, and tough; a change which is most obvious in the septum lucidum, which, in the early stages of general, and the later ones of chronic mania, instead of the exquisite delicacy which renders its demonstration so difficult in health, becomes a toughish and resistant membrane.

The *pia-mater*—tender mother of the brain, and its wondrous offspring of thought and passion, is far more closely and intimately related both in health and disease with the organ to whose more noble parts it supplies nutriment than either of the other meningeal wrappings. The pia-mater is more than a mere investing membrane; it is more than a subserous connective tissue of vascularity greater than is common to such parts. It is a vascular plexus, admirably arranged to supply the

grey matter of the convolutions with an abundant supply of the nutritive fluid, so loose and large in its ramifications as obviously to suggest the idea, that its construction is also subservient to rapid and great changes in the quantity of blood in the organ it supplies. What the submucous vascular layer of the stomach is to the function of digestion, that the pia-mater appears to be to the higher functions of the brain; and it is more than probable, that active thought or intense emotion cause in it hyperæmia as sudden, frequent, and transitory as the function of digestion gives rise to in the vascular layer of the stomach. One part of this plexus, or rather an appendage to it, the choroid fold within the lateral ventricles, has a structure analogous to, if not identical with erectile tissue. Upon this resemblance an ingenious writer in the *Dublin Quarterly Journal of Medicine*, has based the theory, that sleep in the normal state, and epilepsy in the abnormal state, are dependent upon a turgid or erectile condition of this apparatus, by means of which, a gentle but general pressure is exercised from within upon the whole substance of the brain. With regard to epilepsy, there are unsurmountable objections to this theory, but the very existence of such a structure in connection with the pia-mater increases the probability that frequent turgescence of this membrane is a physiological state. "There is no question," says Rokitsansky, "that congestion of the pia-mater is a very frequent occurrence." "Yet, if we except the *post-mortem* congestion of the pia-mater covering the posterior lobes of the cerebrum, any considerable degree of congestion is far less commonly met with in the dead subject than is usually supposed; and there is, perhaps, no respect in which moderation in estimating appearances needs so much to be impressed upon the unpracticed observer, as in regard to the quantity of blood contained in the vessels of the pia-mater. As a general rule, a very moderate injection of these vessels is erroneously looked upon as congestion." "The terminations and consequences of the congestions vary, according to the frequency and duration of their cause. They consist of thickening and condensation (increase of volume,) of the pia-mater and arachnoid, of permanent infiltration of the former, and a varicose condition of its vessels. Such a state of the inner membrane is well marked after the congestions which are produced by continued and forced exertion of the mind, or by repeated intoxication, especially by alcoholic drinks; (op. cit. pp. 339 and 340.)

Thus we learn from this great pathologist the frequency of congestions of the pia-mater; their excitation by two of the common causes

of insanity, mental overstrain and drunkenness; and lastly, the difficulty which exists in recognizing, after death, the existence of a pathological degree of this frequent congestion. The same difficulty exists in the tissue to which I have compared its functions, namely, the sub-mucous vascular layer of the stomach. In both these instances this difficulty of *post-mortem* recognition arises from the same cause. A moderate degree of congestion is in neither instance pathological. It becomes so only when the degree or frequency of the congestion tends to produce structural change. The last moments of life are commonly passed in a state adverse to the continuance of congestion, unless they are attended by such difficulty in the respiratory movements as to impede the return of the venous blood to the heart, and hence a state of congestion which may have existed in the pia-mater, even to a short time before death, may have left no traces discernible after that event.

Rokitansky does not appear to have paid particular attention to the pathology of insanity. Wide and profound as his pathological knowledge undoubtedly is, he here and there hazards statements which indicate that persons dying insane did not frequently come under the investigation of his scalpel. Thus he says, that "terminations of meningitis, by which the surface of the brain and the skull are bound together by a series of successive, normal, and false membranes, are frequently found in mental disease, especially in cases of secondary imbecility;" (*op. cit.* p. 343.) It is very certain, however, that such gross and palpable results of meningitis as adherent false membranes, are of extremely rare occurrence in any form of mental disease. Congestions of the pia-mater, whether recognizable or not after death, are undoubtedly most common, but they rarely pass the boundary line (if there is such a limit) of phlogosis. The exudations of the pia-mater in mental disease are not of the organizable fibro-albuminous kind. They are rarely ever distinctly albuminous. It is rare to find them even opaque, either from partially coagulated albumen or from fat. Even when the arachnoid is thickened and opaque from exudations of this kind, those of the pia-mater are remarkably limpid and serous. The adherent false membranes above referred to are not found once in a hundred cases of persons dying insane; and even in these rare instances their occurrence is traceable to a pre-existent inflammation, and is not to be considered as a condition proper of insanity. According to Vogel, fibrinous exudations result mainly from the minute capillaries, whilst serous or hydropic effusions derive their source from

the small veins. The plexus of vessels which forms the pia-mater is decidedly venous in its anatomical character, and the serous nature of its ordinary exudation may fairly be thus accounted for.

Although fibro-albuminous exudations in the pia-mater, and the false membranes and adhesions therefrom resulting, are so uncommon in insanity, there is one form of adhesion of frequent occurrence in this membrane, namely, the slight but important adhesion between it and the grey substance of the convolutions. The plexus of vessels more or less infiltrated with serous effusion, is sometimes very readily separable from the grey substance which it invests. But in many instances it is not so. What are called adhesions more or less intimate and extended are found to have formed, so that sometimes over the whole extent of the convolutions, sometimes only in isolated parts, the convolutions cannot be divested of their vascular envelope, without small portions of the grey substance remaining adherent to it. In these instances there is no appearance of fibro-albuminous exudation in the pia-mater; but it is probable that the cytoblastema of the grey substance has received an addition of fibro-albumen from the minute arteries and arterial capillaries in connection with the pia-mater, and ramifying in the grey substance; an addition which prevents the small vessels from being withdrawn from the soft substance of the grey matter with the same facility as in the normal state. Something, also, may be attributed to an increased toughness in the coats of the minute blood-vessels preventing their facile rupture.

Congestion of the pia-mater, and consequent serous effusion into its meshes, is the constant result of atrophy of the brain. "When an empty space is formed within the skull by a reduction of the volume of the brain, it is filled up by an increase of the volume of the inner membranes of the brain, and especially by an extraordinary exhalation of serum into the tissue of the pia-mater, the sac of the arachnoid, and the internal cavities of the brain, more particularly the lateral ventricles. These changes result from the congestion of the vessels which the vacuum produces." (op. cit. antea p. 364.)

Thus arises the hyperemia *e vacuo*, the pathological condition of the very frequent cases of spurious apoplexy which occur among old and chronic lunatics—every attack of which renders the vessels of the pia-mater more dilated and tortuous, and more disposed to the recurrence of the congestion. This may, and frequently does, concur with an anemic, as well as atrophic condition of the substance of the brain. In

the healthy organ, congestion of the pia-mater cannot occur without accompanying congestion of, at least, the grey matter of the convolutions; but under the pathological conditions which attend atrophy of the organ, a sudden congestion of the loose and water-logged membrane frequently occurs, without affecting the anemic and atrophic brain otherwise than by adding a temporary impediment to its functions from the sudden pressure.

To recapitulate. The pia-mater in rare instances is found to be the seat of fibro-albuminous exudation, and consequent adhesion. It is the very frequent seat of congestion, which may or may not be obvious after death. Frequent congestions enlarge and render its vessels more tortuous. They also result in a thin hydropic effusion; more rarely in a turbid albuminous one. Not unfrequently the membrane contracts adhesions to the grey matter of the convolutions, but without visible exudation of albumino-fibrin or false membrane. In cases of acute mania and melancholia, thin extravasations of blood, not larger than a finger nail, occur in its tissue. Diffuse inflammation of the pia-mater, and tuberculous inflammation and deposit, are extremely rare among the insane.

The pathological conditions of the choroid plexus are as obscure as its physiological purpose. It is not found hypertrophied in epilepsy, which it should be, were the theory true which attributes the production of that disease to its turgescence. It often contains cysts analogous to those observed in Bright's disease, in the malphigean bodies; but whether the frequency of these cysts is greater among the insane than the sane there are no data to determine.

To be continued.

THE STAR OF BETHLEHEM.

(From Household Words.)

Six hundred and ten years ago a sheriff of London, named Simon Fitz-Mary, founded and built, in the parish of Bishopsgate, near the north-east corner of Lower Moorfields, a priory dedicated to St. Mary, of Bethlehem. It was required that the prior, canons, brothers and sisters maintained upon this foundation, should represent the darkness of night in their robes; each was to be dressed in complete black and wear a single star upon the breast. Into the darkness of the clouded mind of the poor lunatic, no star then shone. He lived the life of a tormented outcast.

The priory of St. Mary of Bethlehem in Bishopsgate, was within two dozen years of completing the third century of its life as a religious house, when there were great changes at work among religious houses in this country, and a London merchant-tailor—Stephen Gennings—offered to pay forty pounds towards buying the house of Bethlehem and turning it into a hospital for the insane.

Twenty-two years later, King Henry the Eighth made a gift of the house to the city of London, and then it first became by order of the city authorities, a Lunatic Asylum. Only the faintest glimmer of the star that was the harbinger of peace then pierced the night of the afflicted mind. The asylum was a place of chains, and manacles and stocks. In one of the last years of the sixteenth century, when Bethlehem, as a place of refuge—or rather of custody—for the insane, was fifty-three years old, a committee appointed to report upon it, declared the house to be so loathsome and filthy that it was not fit for any man to enter.

Seventy more years went by, and the old house was then not only loathsome in all its cells, but as to the very substance of its walls decayed and ruinous. A new building became necessary, land was granted by the mayor and corporation, in Coleman Street ward, and funds were collected. A pleasant little incident is told of the collection. The collectors came one day to the house of an old gentleman, whose front door was ajar, and whom they heard inside rating his servant soundly.

because having lighted a fire with a match, she had put the match into the fire, when it could have been used a second time, because it was tipped with sulphur at both ends. To their surprise this old gentleman—when the collectors asked him for some money—counted out to them quite cheerfully, four hundred guineas. They remarked upon what they had overheard.

"That is another thing," said he. "I do not spend this money in waste. Don't be surprised again, masters, at any thing of this sort; but always expect most from prudent people who mind their accounts."

Partly with charitable purpose, partly with selfish purpose, to provide a place of confinement for the lunatics, whom it was not safe to leave loose in the streets of London, abundant funds were raised; and, in the year 1675, the first stone of a new Bethlehem was laid—south of Moorfields—on London wall. The building was a large one, with two wings devoted to incurables. It had garden ground, and at its entrance gate were set up the two stone figures of madness carved by Cibber—Colley Cibber's father—who is nearly as well known by them as by the emblematical figures at the base of the monument on Fish Street Hill, of which also he was the sculptor. One of the figures representing madness is said to have been modeled from Oliver Cromwell's big door-keeper who became insane. The two figures—repaired by Bacon—stand in the entrance hall of the existing Bethlehem.

But the existing Bethlehem is not that which was built in 1675, facing the ground in Moorfields, then a pleasure to the citizens, laid out with trees, grass, railings, and fine gravel-paths, and traversed by a broad and shady walk parallel to the hospital, that was known as the City Mall. Bethlehem, while the pleasure lasted, was a part of it. For a hundred years an admission fee—first two-pence and then of a penny—was the charge for a promenade among the lunatics. The more agreeable of the sufferers were lodged conveniently on the upper stories, and the more afflicted kept in filth within the dungeons at the basement.

Bethlehem, as an asylum for the insane, even in its first state of sixteenth century loathsomeness, while it was still half a religious house, had been a show-place. Thus certain gentlemen in one of Decker's plays asks:

"May we see some of those wretched souls
That are here in your keeping?"

And the answer is from

FRIAR ANSELMO (*in charge of Bethlem*).—

Yes, you shall:

But gentlemen, I must disarm you then.
 There are of madmen, as there are of tame,—
 All humor'd not alike. We have some here
 So apish and fantastic, play with a feather;
 And tho' 'twould grieve to see God's image
 So blemished and defaced, yet do they act
 Such antic and such pretty lunacies,
 That spite of sorrow they will make you smile.
 Others, again, we have, like angry lions,
 Fierce as wild bulls, untamable as flies;
 And these have oftentimes from strangers' sides
 Snatch'd rapiers suddenly, and done much harm;
 Whom, if you'll see, you must be weaponless."

No doubt a like rule was imposed also upon the promenaders who strolled into Bethlem from the City Mall. It was only in the year 1770, that the asylum ceased to be included among penny-shows.

At the beginning of the present century, the second hospital being of not more than about one hundred and thirty years' standing, it was found necessary to rebuild it on another site. The city of London granted eleven acres on the Surrey side of the Thames, which were part of its Bridge-House estate, for eight hundred and ninety-five years, dating from the year 1810. Two years later, the first stone of the existing Bethlehem was laid by the Lord Mayor, and the building was completed—two-and-forty years ago—at an expense of about one hundred and twenty thousand pounds, of which sum more than half was contributed by the country in successive grants from Parliament. As the united hospital of Bridewell and Bethlehem, the establishment is well endowed, drawing from its estates and funded property an income of about thirty thousand pounds a year. That is the first material fact in a case which we shall presently be stating.

But even at the time, so recent as it is, when the new Bethlehem was built, and for some years after, the star of Bethlehem was set in the deep blackness of night. Simon Fitz-Mary's priors, in the dress he prescribed for them, might be emblems of the light that had shed no ray into the darkness round about. None needed more than the lunatic to know, and none knew less than he did, of a star that should lead to peace on earth and good will among men. Afflicted with a disorder which we now understand to result mainly, perhaps invariably, from depressing causes, he was, till the beginning of this century and after it, submitted to depressing treatment that alone would have sufficed to drive the healthiest to madness. The remedy for lunacy which we now find in cheerfulness and hope was sought in gloom and terror.

It was the accepted doctrine as regards the lunatic, that he should not find peace on earth or meet with good will among men. At the beginning of this century insane people were chained up, and even flogged at certain periods of the moon's age. Treacherous floors were contrived that slipped from under them, and plunged them into what are called baths of surprise. One device supposed to be remedial in its effect, was to chain the unhappy sufferer inside a well so contrived that water should creep slowly, slowly from his feet up to his knees, from his knees to his arms, from his arms to his neck, and stop only in the moment that it threatened him with instant suffocation. Dr. Darwin invented a wheel to which lunatics were fastened on a chair, and on which they were set revolving at a pace varying up to one hundred revolutions per minute. Dr. Cox suggested an improvement applicable in some cases, that was to consist in whirling round the lunatic upon this wheel in a dark chamber, and assailing his senses at the same time with horrid noises and foul smells.

It is not our purpose here to tell the history of that great change in the treatment of insanity which is one of the most welcome-signs of the advance of knowledge and civilization in the present century. Only forty years ago, when in France the experience of Pinel at the Bicêtre had already gone far to reverse in many minds and in some places the old doctrine of restraint and terror, at Bethlehem there were found ten women in one side room chained to the wall, wearing no dress but a blanket, and without even a girdle to confine the blanket to the waist. There were other such spectacles, and there was a man whose situation is the subject of one of the plates in the work of Esquirol. In the wise and good Dr. Conolly's recent book upon the treatment of the insane, the case of this man, buried in thick darkness beneath the star of Bethlehem, is thus described. His name was Norris. "He had been a powerful and violent man. Having on one occasion resented what he considered some improper treatment by his keeper, he was fastened by a long chain, which was ingeniously passed through a wall into the next room, where the victorious keeper, out of the patient's reach, could drag the unfortunate man close to the wall whenever he pleased. To protect himself, Norris wrapt straw about his fetters. A new torment was then invented. "A stout iron ring was riveted round his neck, from which a short chain passed to a ring made to slide upwards and downwards on an upright, massive iron bar, more than six feet high, inserted into the wall. Round his body a strong iron bar,

about two inches wide, was riveted; on each side of the bar was a circular projection, which being fastened to and enclosing each of his arms, pinioned them close to his sides. The effect of this apparatus was that the patient could indeed raise himself up so as to stand against the wall, but could not stir one foot from it, could not walk one step, and could not even lie down except on his back; and in this thralldom he had lived for twelve years! During much of that time he is reported as having been rational in his conversation. But for him, in all those twelve years, there had been no variety of any kind, no refreshing change, no relief; no fresh air, no exercise; no sight of fields, or earth, or heaven. . . . It is painful to have to add, that this long-continued punishment had the recorded approbation of all the authorities of the hospital."

But the star of Bethlehem had then already begun to shine effectually. Slowly the darkness melted into light, but it lurked long in many corners of the place—so long, that only five or six years ago Bethlehem Hospital was, on account of offences against light and knowledge, which it was said to shelter, made the subject of a parliamentary inquiry. By that inquiry the authorities were roused to energetic action. They had unwittingly allowed the hospital to fall in several respects behind some kindred institutions that kept pace with the improving knowledge of the day. In a liberal and earnest spirit they have since been working to make good their error; aided by a new superintendent at once thoughtful and energetic, they now lead where they used to lag upon the road.

One change that has been rather lately made is characteristic enough of the rest. The brick work which, except a round hole or a fanlight, used to fill up the outlines of what would have been windows in an ordinary house, has all been knocked away; the bars and double bars between the patient and the light have been uprooted; large well-glazed windows with the glass set in light iron frames, that look even less prison-like than thicker frames of wood, have, throughout, been substituted for the grated crannies which are still preserved by Government in that part of the hospital devoted to state prisoners; and in this way the quantity of light and sunshine let into all the rooms and wards has been increased sevenfold, or even tenfold. It gives life to the flowers in the wards, sets the birds singing, and brightens up the pictures and pleasant images with which the walls are all adorned. Light has been let into Bethlehem in more senses than one. It is now an asy-

lum of the most unexceptionable kind. That is the second material fact in the case which we shall presently be stating.

For, we have a special case to state nearly concerning a large section of society, and we are coming to it surely, although slowly. But we must dwell for a little while upon the pleasantness of Bedlam. We went over the hospital a week or two ago. Within the entrance gates, as we went round the lawn toward the building, glancing aside, we saw several groups of patients quietly sunning themselves in the garden, some playing on a grass-plat with two or three happy little children. We found afterwards that these were the children of the resident physician and superintendent, Dr. Hood. They are trusted freely among the patients, and the patients take great pleasure in their presence among them. The sufferers feel that surely they are not cut off from fellowship with man—not objects of a harsh distrust—when even little children come to play with them, and prattle confidently in their ears. There are no chains nor strait waistcoats now in Bethlehem; yet, upon the staircase of a ward occupied by men—the greater number of whom would, in the old time, have been beheld by strong-nerved adults with a shudder—there stood a noble little boy, another fragment of the resident physician's family, with a bright smile upon his face, who looked like an embodiment of the good spirit that had found its way into the hospital, and chased out all the gloom.

Except the detached building for women, which is under the direction of the state, and in which are maintained criminals discharged from punishment on the ground of lunacy—and this dim building, full of bolts and bars, in which male patients are herded without system, is a bit of the old obstinate gloom deserving of the heaviest censure, and disgraceful alike to the Governors of the Hospital and the Governors of the State—except this, all the wards of Bethlehem are airy and cheerful. In the entrance hall there is a sharp contrast manifest upon the threshold between past and present. Cibber's two hideous statues of the madmen of old, groaning in their chains, are upon pedestals, to the right hand and the left. Before us is a sunny staircase, and a great window without bar or grating, except that made by the leaves of growing plants. The song of a bird is the first sound that greets the ear. We pass from room to room, and everywhere we find birds, flowers, books, statuettes, and pictures. Thousands of middle class homes contain nothing so pretty as a ward in Bedlam. In every window growing plants in pots, ferneries in Ward's cases. Singing birds

in cages, and sometimes, also, baskets of flowering plants are hung in two long lines on each side of the room, and in the centre of one wall there is, in every ward, an aviary. All spaces between the windows are adorned with framed engravings;—spoiled prints, that is to say, impressions from, for the most part, valuable and costly plates, in which there is some flaw that might easily escape the inexperienced eye, have been presented to the hospital in great numbers by considerate printsellers, and hundreds of these ornament its walls, varnished, framed, and screwed permanently in their places by the patients themselves. Scarcely less numerous are the plaster busts and statuettes on little brackets. The tables in every room are brought to a bright polish by the hand-labor of its tenants, and their bright surface adds much to the elegance and lightness of the general effect. Upon the tables are here and there vases, containing fresh or artificial flowers, newspapers, and other journals of the day, books, chess-boards, and draught-boards. A bagatelle-board is among the furniture of every ward; generally it includes also a piano or an organ. We have spoken generally of a ward, but the word does not mean only one long room or portion of a gallery. There is that common room; there is a not less cheerful dining-room; there is a bath-room, an infirmary; and there are the old dungeon-cells, once lighted by a round hole, and supplied with a trough on the floor for bed, and with an open drain-hole for toilet furniture—now transformed into light and airy little bedrooms, with a neat wooden bedstead duly equipped to take rest upon, and carpet on the floor. Dismal old stoves have been removed, and the hot air apparatus, by which the building is warmed, is assisted, for the sake of ventilation and of cheerfulness, with open fires.

Again, there is at the top of the building, with glass walls, and supplied with lights for evening and foggy weather, one of the best billiard-rooms in the three kingdoms, maintained for the use of the patients. It is fully adapted for its purpose, and is comfortably furnished; a large table, upon which are arranged magazines and newspapers, not being forgotten. Out of doors there are pleasant airy grounds; there is the poultry to feed; there are sundry fittings destined to provide amusement; there is a good bowling-green and skittle-ground.

Furthermore, there is good diet. The dietary at Bethlehem has been liberal for many years; it being now clearly understood that full nourishment to the body is of important service in the treatment of

insanity. There is a liberal allowance daily of good meat and beer, with no omission of the little odds and ends that make eating and drinking burden upon life not altogether unendurable, and take the idea of prison-commons quite out of the hospital allowance. In one cool room we found a nest of plates containing gooseberry pie, which had been deposited there by their owners, simply because the room was cool and the day hot. If there be two ideas that never before came into association in our minds, they are gooseberry pie and Bedlam.

As to all the small comforts of life, patients in Bethlehem are as much at liberty to make provision for themselves as they would be at home. The restraint to which they are subject is, in fact, that to which they would be subjected at home, if they could there, as in the hospital, put their case under the direction of a competent physician. Their pleasures are not even always bounded by the hospital walls. They go in little knots, with an attendant, to enjoy the sights of London and the country round about.

When we compare with such details, the tale of Norris, twelve years bound in iron hand and foot within these walls, and that within the present century, we marvel at the quickness and completeness of the change made by a reversal of old superstitions on the treatment of insanity. The star of Bethlehem shines out at last. So sure is the influence of faith and kindness, that we found even in the refractory ward, glass fern-cases laid handy to the fist, and all the little ornaments and pleasures to be found elsewhere. Not a case had been cracked; not a plaster image had been broken.

Thus we have in Bethlehem a hospital endowed for the service of society by benefactions that began six hundred years ago, in which poor lunatics can be maintained and treated quite apart from any system throwing them on county or parish rates, not as the objects of a charity, but as the receivers of a legacy from men who wished to be of use to persons who would find the legacy an aid to them. The money was not left to the rich who needed it not. The charter of the hospital requires therefore that the patients who are admitted should be poor. This was interpreted to mean chiefly paupers, but the care of pauper lunatics devolves on the society in which they live, and is accepted by it. The great county lunatic asylums now receive them, and for this reason the number of admissions into Bethlehem was diminishing, when Dr. Hood, the last appointed resident physician and superintend-

ent, made a suggestion to the governors, which after careful inquiry, they found to be not only wise but practicable without violation of their charter, and which they have accordingly adopted.

Bethlehem is not for the rich; and, for the pauper lunatics of the community, there is now ample and satisfactory provision. But there is an educated working class, hitherto left to bear its own sorrow in sickness of the mind, or else be received among the paupers: curates broken by anxiety; surgeons earning but a livelihood who, when afflicted with insanity, are helpless men; authors checked by sudden failing of the mind when bread is being earned for wife and children; clerks, book-keepers, surveyors, many more; who often battle against trouble till the reason fails, and then must either come upon the rates, or, as far oftener happens, be supported by the toil of a brave wife's fingers, or by a sister who from scanty earnings as a governess pays the small fee that can be afforded to a third-rate, private, lunatic asylum. How often does the toiling governess herself break down,—and is she also, whose calling proves that she has been compelled to self-dependence, is she, when her dependence on herself is lost, to be thrown as a pauper on the county lunatic establishment? Here is a new use for Bethlehem, and it is owing mainly, we believe, to the wise thoughtfulness of Dr. Hood that upon such wanderers as these, and upon such only, the star of Bethlehem now shines. To make that fact distinctly known, is the whole object of the present notice.

For the last twelve months and always henceforward, Bethlehem Hospital has been and will be an institution for the reception and cure of no person who is a proper object for admission to a county lunatic asylum; but it will admit persons, chiefly of the educated classes, who with the loss of reason so far lose the means of livelihood that they cannot obtain suitable maintenance in a good private establishment. They will be maintained and treated while in Bethlehem, free of all cost to themselves, and also not at the cost of any living man, but as the just receivers of a legacy intended for their use and benefit. It is to be understood that now, as heretofore, patients in Bethlehem Hospital are of three kinds. Until Government shall have brought to their fulfilment certain plans which it is said to cherish secretly for the independent custody of criminal lunatics, there will be criminal lunatics in Bethlehem; but the building occupied by them is perfectly detached from the main structure, and is not under the control of the hospital authorities. In Bethlehem proper, it is necessary that a certain portion of

the yearly income, arising from gifts made expressly upon that condition, should be spent upon the sustenance and relief of incurable patients. The number supported by this fund is limited, and there are always candidates for admission to the wards of the incurables awaiting any vacancy that may occur. The rest of the hospital and the main part of it, the leading design also of the institution, is for the cure, not the mere harboring, of the insane. It is only to cases which there is fair reason to hope may prove curable, that admission will be given. Nobody will be received as curable who has been discharged uncured from any other hospital for lunatics, or whose case is of more than twelve month's standing; or who is idiotic, paralytic or subject to any convulsive fits; or who is through disease or physical infirmity unfit to associate with other patients. On behalf of any person of the class we have specified who has become insane, and whose case does not appear to be ineligible on any of the accounts just named, application may be made to the resident physician of Bethlehem Hospital, Southwark, London, for a form which will have to be filled up and returned. The form includes upon one large sheet all the certificates required by the hospital, and every information likely to be required by the patient and his friends, or hers.

A patient having been admitted, is maintained and treated for one year. If he (or she) be not cured at the expiration of a year, and there remain hope, that appointed limit of time is extended by three months, and perhaps, again, and once—but only once—again, by three months; but the rule of the institution is, that patients be returned to their friends, if uncured at the expiration of a twelvemonth.

We did not know until we read a little book on the statistics of insanity, by Dr. Hood—in which ten years of the case-books of Bethlehem are collated, with the experience of other hospitals for the insane—how constantly insanity is to be referred to a depressing influence. Three in five of the men, and a still greater proportion of the women, who have come and gone through Bethlehem during a space of ten years, were maddened simply by distress and anxiety. The other assigned causes operate also by depression,—disappointment, over-work, death of relatives, bodily illness, the gloom which some account religious, and intemperance. In ten years, all Bethlehem furnished only six cases of lunacy through sudden joy; and Esquiroi remarks that the excess of joy which destroys life never takes away the reason; "and" Dr. Hood adds, "he sets himself to explain away certain cases which

are supposed to support a contrary conclusion." Every case in his own experience that looked like madness through excess of joy, he traced, upon investigation, to a reaction that produced the opposite emotion. The depressing influence of solitude is also a frequent cause of insanity; for which reason insanity prevails in lonely mountain districts, and is much more common in England among people who live in the country than among the inhabitants of towns. A cheerful temper and a busy life, with generous and wholesome diet, are the best preservatives of mental health. Against them it is hard work even for hereditary tendency to make any head.

Another most important fact, which is expressed very clearly in the Bethlehem tables, urges every one who has contemplated taking advice for any friend become insane, to lose no time about it. Every month of duration carries the disorder farther from a chance of cure. The chances of cure are four to one in cases admitted for treatment within three months of the first attack; but after twelve months have elapsed, the chances are reversed, and become one to four. Of the whole number of patients admitted for cure into Bethlehem, cure follows in three cases out of five.

In saying this, however, we should give a false impression if we did not transfer an estimate founded by Dr. Thurnam upon the traced history of two hundred and forty-four patients of the York Retreat, which we find quoted without dissent in one of the Bethlehem Hospital reports: "In round numbers, of ten persons attacked by insanity, five recover, and five die, sooner or later, during the attack; of the five who recover, not more than two remain well during the rest of their lives; the other three sustain subsequent attacks, during which at least two of them die. But, although the picture is thus an unfavorable one, it is very far from justifying the popular prejudice, that insanity is virtually an incurable disease; and the view which it presents is much modified by the long intervals which often occur between the attacks, during which intervals of mental health (in many cases of from ten to twenty years' duration,) an individual has lived in all the enjoyments of social life."

It may be worth while, also, now that we speak of English insanity, to correct the common error which ascribes a tendency to produce insanity and suicide to our November weather. In England, as in France, in Bethlehem, as in the Salpêtrière, the greatest number of insane cases occur in the six summer months, especially in May, June, and July. In London, the greatest number of recoveries occur in November.

BIBLIOGRAPHICAL.

A Lecture Introductory to the Thirteenth Annual Course of Lectures and Evening Entertainments, at the Pennsylvania Hospital for the Insane, at Philadelphia. By Edward A. Smith, M. D., Assistant Physician. Published by request of the Class.—1857.

LITTLE more than two centuries ago, medicine was defined and practically considered, among the most civilized nations, as the art of adapting specific remedies to indications of bodily disorder. Now, the notion of specifics obtains only with the ignorant, and the agents then used have in great part been laid aside, as either noxious or inert. While it is true that discoveries in chemistry and natural history are continually supplying the places of these discarded nostrums with valuable remedies, yet the greatest progress in medicine has no doubt been in quite another direction. This is evident from the present general statement of the science in terms: for although the facts of experience, in the progress at least of the less positive branches of knowledge, come before the logical conceptions of their subject, yet the latter, as the enlarged shadows, magnify and define for their easier study. Medicine has really gained a meaning wider and more comprehensive than we are apt to think. It will perhaps be generally stated to mean, the science of the prevention and cure of disease; and to this, in their sense of the latter term, the "advanced thinkers" of the profession would not object. But these claim that from being the synonym of the "physic" of the middle ages, all the meaning of the "physics" of the ancient philosophers is now due the term medicine. In this sense it treats of disease in its physical, mental, and moral manifestations, and includes all means for the improvement of the human race. Without passing upon this definition, or the system to which it belongs, it may at least indicate the extent of the change taken place in the practice of the healing art.

This is best illustrated, however, as is also that the ambitious definition noticed is only a magnified image of facts, in modern institutions for the insane. Of all the agencies which these supply in behalf of

humanity in a state of depravation the most fatal to its nobility and happiness, medicine in its narrow sense is only one among many of at least equal importance. The completest sanitary provisions and means for bodily comfort are deemed a prime necessity, and great improvements in the construction and fitting up of buildings for this purpose are constantly making. The agency of moral teaching and religious observance is fully availed of, and chapels and chapel-rooms are attached to these institutions. Bodily and mental hygiene are carefully studied, and liberally provided for, and finally systematic education of every sort completes a practical compend of the modern enlarged idea of medicine.

It is pleasant to dwell upon what has been effected in American institutions toward the perfection of this system, and the realization of this noble idea; and the Introductory Lecture of Dr. Smith, giving a history and description of the means of the Pennsylvania Insane Hospital for the recreation and improvement of its patients, fully represents all that has been done in this direction. It is stated that in 1751, "the benevolent citizens of Philadelphia"—a title that has continued to be deserved as a general one to this day, —founded a hospital, from which the department for insane was separated in 1841, and the new building opened by Dr. Thomas S. Kirkbride, its present distinguished superintendent. "Means of diversion and amusement," says the lecturer, "have ever been a prominent object here, and year by year has been developed a plan, no where so fully carried into effect, as in this institution." The description which follows in the lecture, of what has been accomplished in this way, is perhaps sufficient proof of the statement; and when we consider that the institutions for the insane in this country have been established and operated from very different views of their purpose and the manner in which it might best be attained, with the different circumstances of their location and pecuniary provision, this will not be thought invidious.

The winter lecture-courses were begun in the year 1845, and have been continued with regularity and success to the present season. They have been upon subjects of natural science and historic description, illustrated by pictures and scientific instruments; themes calculated to excite curiosity, and fix the attention upon new and healthful objects. During the first season of 1845-6, forty-three lectures were delivered by Dr. John Curwen, then assistant physician, and now superintendent of the State Lunatic Hospital, at Harrisburg, Pa. The

twelfth season of the year 1856-7 was prolonged to nine months, comprising three weekly lectures. For the five years closing with the season previous to the one introduced, Dr. J. Edwards Lee was the principal lecturer, and is highly complimented by his successor. Many lectures have also been given each year by able and philanthropic gentlemen, not connected with the hospital. The introductory is an interesting and valuable record of the progress and success of the efforts, and the numerous benefactions which have created a marked excellence of an institution in all respects among the first of its class.

SUMMARY.

In an article entitled: "Illustrations of Insanity, furnished by the Letters and Writings of the Insane," which was published in a previous number of the JOURNAL, Dr. Brigham introduced the following letter as a specimen of most entire incoherence:

"MY DEAR SISTER: As the cedars of Lebanon have been walking through Edgeworth forest so long, you must have concluded that I have returned to the upper-world, but I am still in purgatory for James K. Polk's sins, which, if they do not end in smoke, surely have as good a chance of beginning that way as the ideas began to shoot, for if T. had not left his trunk on the cart at the Depot, our shades would have been a deuced sight nearer to Land's End than Dr. Johnson said they would by the time the Yankees rebelled,—(ad interim) but I am now about between the porch and the altar, as Dr. — used often to express himself, under the droppings of the sanctuary, where I wish to forget old things for a time at least, and return to some better place than the last. I could have kicked plagiarism to the seventh seal.

"Do you know what this same long, taper roller is? well pop it off, if by their works ye shall know them. Pollock has as good a right to be a D. D. as that doctor we read of in Blackwood that sought so long for spoons and found them not, because they were all lead until they were new burnished in Holyrood palace very near the place where Polk traced his pedigree, a little too near the loins of William the Conqueror, for the pleasures of memory or sense either, for Thompson, Bryant, Africaner, Ainsworth or anybody else. I said I had been to the Poles, and S. had been there, and let T. Y. be witness that it was something more than stars, it is one thing neither you nor I can comprehend till we compare notes, but there is the least pit in hell that you ever saw, or ever will see, and a certain little white Devil just as ready now as ever to lend a helping hand to the cook to give her a lift over those bars. If you should ever be inclined to try Nebuchadnezzar's hollow furnace, for he did not wash all my guilt away did he? No

indeed for he silvered my head nicely, so as to make it shine afar off. But the end of these things is not yet—consult S. I should like to see H. Honor to whom honor is due—tribute to whom tribute—give the Devil his due."

The writer, a student in one of the Eastern colleges, was brought to the institution about three months before the date of the above letter, laboring under an attack of acute mental disease, induced by too intense application to his studies. Six months afterwards he was discharged recovered; subsequently rejoined his class, and completed his college course with honor. He commenced the study of medicine, graduated at the College of Physicians and Surgeons in New York City, and connected himself with the New York Hospital, where he filled the office of house-physician with great credit to himself and advantage to the institution. Soon after the expiration of his term of office he had a fatal attack of remittent fever.

The following extract from his diary is furnished by his father. In connection with the letter it has a peculiar interest.

"Yesterday I found in the *AMERICAN JOURNAL OF INSANITY*, April, 1848, (p. 303) a copy of my letter written to Helen about six weeks before I left Utica. It is the most absurd medley of nonsense, but it recalled to my mind ideas of no little interest.

"My memory during the whole period of my violent illness was preternaturally active, calling up scenes and recollections of very early childhood—the toys and various utensils then about me, the little adventures and queer speeches which will cling to one's memory, while more important matters escape—these, and almost every thing, which, in a varied and not limited series of reading—names, scenes, historical and personal incidents, fact or fiction, phrases of other languages, passages of poetry and of the Bible,—all these, by the merest similitude of sound, of name, or any other near or remote principle of association, were grouped in my mind, and would flit across its vision with inconceivable rapidity.

"Often, I remember, have I lain on my sleepless bed, and strung one group of words together, as they thus occurred to me, and, catching at some slight analogy in the last, would run off into another distinct series; and thus, till the tongue fairly wearied, and the lips refused to move, have arranged the affairs and settled the disputes of generations past, present, and yet to be; of princes and potentates, of injured queens, and defrauded heirs apparent,—rummaging the legends of the Tower, and all the dark, romantic lore of Scottish feudal life, righting

the wrong in every department or age of human existence, quarreling most irreverently and pertly with many characters which good people deem sacred, and elevating in my own imagination many of those luckless but interesting heroes who, with many dazzling and redeeming qualities, had yet the misfortune to be wicked.

"Here came out in full my sneaking liking for Saul and Pontius Pilate (a very clever fellow, by the way, who occasionally appeared in the hall, and had an unfortunate squint), Henry VIII, Herod (whose valiant slaughter of Judea's infant-ry always inspired my young mind with a dread feeling of admiration), and Nebuchadnezzar. All these were living, breathing personages to me—for death seemed but a voluntary step, and a slight one—and with *these* I communed in the night-watches. I thought I heard them answer me, and I spoke as in reply;—sometimes sadly, remembering some sorrowful scene gone by, with which I intimately connected them, sometimes in irrepressible glee, and again in anger, the mood varying with the turn of a word. Sometimes I would fall upon what, to me, was a sublime thought, and remembering Napoleon's saying, was pretty certain to change to a ludicrous interpretation, or some other such turn.

"Something of these fitful changes I recognize in this letter. It represents, tolerably well, the state of my mind,—*very* well, for it is almost a transcript of what I would have said, if speaking to my sister. I well remember the day when the sheet of paper was brought me, upon which I wrote this, in a scrawl of a hand, for I dashed impetuously along, and what a sane person would say was an ill-spelled letter. But the spelling had its associations. This was the day, or one or two after I had seen Helen.

"Shortly after I got one from *her* which most grievously distressed me. From it, I first realized that I was under restraint, and in an *Insane Asylum*. I held my head between my hands, and pressed it against the wall;—every pulse came bounding with double force and rapidity;—it seemed as if I *should* go mad then, and forever. I did not notice those who passed,—nor spoke, nor interested myself in the employments of others.—I was *changing*.

"When Dr. Brigham passed through, I *begged* of him to take me from this place.—I was too proud for that before. He tried to put me off.—I followed him to the end of the hall, and then with my eyes till he passed out of sight.

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"It was not many days before the Doctor took me with him, as he

went his rounds, and left me in a lower and a better hall. Then the scenes with which many of my delusions were connected, were changed. I looked no more at things around me through the distorted medium of an assumed character. I was H. B. M., not Mr. E., (my convenient x character for any number of unknown personalities.)

"It was not without a voluntary effort, and *that* a painful one, that I tore myself from a glorious world of my own creating, and a throne of my own construction, to take my place in a real, and very commonplace lower planet, full of ordinary and intractable characters. For did I not leave the inspiring and elevating society of the great, and good, and heroic of every age,—and glorious schemes of empire,—and grand ideas of improvement whether commercial, or military, or literary, or in the fine arts? Were not tall monuments and noble temples to rise over this, and every other land? Were not the thoughts of genius, expressed as they never before had found expression, to glow in fresco, on canvas, or to stand forth in pure dignity in the marble statue? Were not the scenes of my childhood's pleasures to be made sacred by its offering?

"Then should the pale scholar, and the inspired poet no longer waste unheeded away,—but each in his place should enjoy his fit reward. And the white sails of every nation, but rather of mine, should be spread to the breeze in every sea, bringing back richer freights than those of Solomon;—and armies should stand ready at my bidding, innumerable, and comprising in their legions every force that ever in truth or poetry took the field;—the battalions that contended with each other when there was war in heaven;—the veterans of Napoleon,—and the tiny squadrons of faëry land.—But these I left:—and, as I descended from my throne, reason resumed hers.

"Not many days afterwards, I wrote a most urgent letter home, as perfectly sane as ever I was or shall be, requesting to be removed.

"Day after day, and hours, and minutes I counted, till I reached my home—FREE."

TRAUMATIC EPILEPSY CURED BY TREPHINING.—J. B. L. resided near Natural Bridge, in Rockbridge County, Virginia, in 1851. Some time during that year, while accompanying a person desirous of leaving his name, cut in rock, above the many whose ambition to excel in climbing steep precipices had urged them to such perilous and useless efforts, Mr. L. fell from a height of thirty feet, and struck the left

antero-lateral portion of his skull against the sharp and ill-defined rocks below.

At the time of falling he was twenty-one years of age, and member of the Sons of Temperance. There was not at the time and had not been any epileptic tendency in any member of his family.

The scalp was deeply cut and bruised; patient was senseless for ten days; head was shaved, and iced water kept constantly to wound.

Fifteen months elapsed before first epileptic seizure occurred. Before this, however, his physician remarked that one of his eyes (that of affected side) looked duller and smaller than the other, which was perfectly natural. Another convulsion followed the first, after an interval of two weeks, and a third occurred three weeks after the second. These attacks were not at all regular, imprudence in eating and mental excitement of any kind seeming to control their frequency of occurrence.

Such was the condition of Mr. L. at the time he sought the advice of the late Professor C. P. Johnson, of the Medical College of Virginia. A dense and depressed cicatrix of the soft tissues extended from the centre of the temporal space obliquely forward, and passed the temporal ridge a distance of half an inch. The depression, the condition of the eye, the frequent convulsions, and general condition of the patient, led to the inference that a still deeper injury had been inflicted, involving the bony surface beneath. Dr. Johnson determined to operate. Excision of bone was made to correspond with the surface occupied by the cicatrix of soft tissues. Two crown pieces were removed—one, superior, size of a Spanish quarter—the other, about the size of a nine-pence. The two were connected by a sort of rectangular piece, the flaps were loosely laid together, a bandage applied, and cold water dressing made use of. Patient complained of some little pain, was rigidly dieted, and purged from time to time.

In two weeks the cicatrization of flaps was complete, and patient had a convulsion at this time, while playing a game of back-gammon, in which he was interested. Six weeks after this attack he had another, while playing whist.

Patient has had no subsequent attack; was prudent two years after operation; has since indulged at times in both excesses of eating and drinking, and has often been subject to moral excitements. Notwithstanding this, he has had no relapse, and enjoys as fine and uninterrupted health as any gentleman in the city. His occupation is that of a merchant.

Dr. St. Geo. Peachy, who communicates the above for the *Virginia Medical Journal*, remarks in a letter to the Editors, that—"four years have now elapsed since the operation was performed by Dr. Johnson. Sight was lost of the patient, and the result of operation was not definitely established, either one way or the other. A few days ago I recognized the face of patient as one very familiar to me while resident physician to the infirmary attached to the college—made myself known, and was kindly offered his entire case for report in your journal. It is interesting in itself, and one of the many monuments attesting the skill of our much lamented friend, Professor Johnson."

ASYLUM FOR THE INSANE IN THE STATE OF IOWA—One important method of displaying a just regard for the principles of Christianity is to give due attention to the benevolent institutions of the day. The hand of charity should be extended to all the varieties of human want; multiplying its forms of action in proportion to the forms of suffering; in the erection of hospitals, lunatic, and deaf and dumb asylums; in establishing dispensaries and poor-houses; in opening receptacles for the reformation and punishment of the vicious and wicked; founding institutions of learning of a high order, with charity scholarships, and perfecting our common school system. It is known that throughout our State there are many unfortunate human beings bereft of reason, for whom no adequate provision has yet been completed. There are others to whom the light of heaven comes not, whose eyes are closed to the happy smiles of their friends, and the beauties of the world; and some who hear not the voice of love and the whispers of living nature. The poor maniac needs prompt and efficient sympathy and kindness and restoration to society, and whilst humanity rejoices over the result of institutions reared for his benefit, experience cheers us with the knowledge that we can almost open the eyes of the blind and unstop the ears of the deaf.

These public enterprises demand no specification at my hands on this occasion. Their establishment is among the duties which every State owes to its citizens, and we should endow and foster them in all their best forms and appointments.

I only mention them, to say, that as God has given unto us the fairest heritage in all the earth to inhabit, let us not dishonor the gift, by erecting upon it institutions, or passing over it a code of laws less wise

and beneficent than those of other countries, or which shall fail in their conception and design to reflect back the beauty, richness and excellency of the land they are intended to bless.

Upon this idea has the lunatic asylum at Mount Pleasant, been wisely commenced. Let it go forward and be completed upon the principle and design of making it a model institution of the kind, as every other kindred institution should be. It is only upon this line of policy that we can hope to lay claim to anything like State superiority in this department of the public service.—*Governor's Message.*

A PHYSICIAN STABBED IN A LUNATIC ASYLUM.—M. Geoffroy, a highly respected physician of Avignon, in France, formerly Mayor of that city, and for many years at the head of the asylum for the insane, was lately assassinated by an epileptic inmate of the institution. The patient was subject to paroxysms of furious mania, but had for some time previously been very quiet, and was thought to be in a fair way of recovery. He was a tailor by trade, and busy at work, on the 30th of April last, during M. Geoffroy's presence in the ward. Towards the end of the visit, he requested the doctor to look at his leg, where he stated that he was experiencing pain, and whilst M. Geoffroy was stooping to examine the limb, the man passed his arm around his neck, and thrust into the left side of his chest, the long scissors used in his trade. He was just going to make a second thrust, when he was secured by the house-surgeon and the steward. The weapon had reached the heart, and M. Geoffroy died in a few moments. The patient had not evinced any dislike for the ill-fated physician, and was most respectful and docile. It is supposed that the horrible deed was done whilst the patient was laboring under a hallucination.—*Med. News and Library.*

HYSTERO-EPILEPSY.—M. Legrand du Saulle has communicated to the French Academy an interesting case of hystero-epilepsy. A young girl expelled several larvæ from her nose after having had for some time a persistent frontal cephalalgia. On the 25th of March, 1851, she had hystero-epileptiform convulsions, lasting several hours. A month after, she was placed in the lunatic asylum of the Côte d'Or, as being epileptic and insane. A few days after, she had forty-five fits, followed by maniacal agitation. Her cephalalgia was persisting, and at times she ex-

pelled larvæ from her nose. Thinking that they came from the frontal sinuses, the author ordered the patient to smoke small cigars, containing arseniate of soda, and he succeeded in killing the larvæ, by having the smoke passed through the nose and sinuses. A few days after, larvæ, without movements, were expelled, the cephalalgia ceased, and there were no more convulsions. On the 8th of November, 1851, the girl left the Asylum in an excellent state of mind and body. She is now (October, 1857,) in perfect health.—*Med. Times and Gazette.*

TO THE SUPERINTENDENTS OF THE AMERICAN INSTITUTIONS FOR THE INSANE.—Prof. Joseph Henry, Secretary of the Smithsonian Institution, in the name of the managers of that establishment, having correspondence and means of communication with public institutions and scientific men, in every part of the civilized world, very kindly offers, through the committee for distribution of reports, to send the reports of the asylums and hospitals for the insane, to any place in foreign countries.

The documents must be sent to the Smithsonian Institution at Washington, D. C., at the expense of the sender, and they will then go whithersoever directed, without further cost.

It is to be hoped that every superintendent will avail himself of this very generous offer, and let his light shine abroad as well as at home.

EDWARD JARVIS.

PHYSIOGNOMY OF INSANITY.—The Publisher of the Medical Times and Gazette, London, announces that the volume for 1858 will contain a series of papers on the Physiognomy of Insanity, by Dr. Conolly. To do full justice to this interesting series, it is proposed to illustrate the subject by portraits taken from life. Photographs have accordingly been taken by Dr. Diamond, and copied in lithography. The first portrait, illustrating "Religious Melancholy," will accompany the first number of the new volume, to be published January 2, 1858.

RESIGNATION.—Dr. R. C. Hopkins has resigned the office of Superintendent of the Northern Ohio Lunatic Asylum.

APPOINTMENT.—Dr. J. Laisy, formerly assistant physician to the Northern Ohio Lunatic Asylum, has been appointed Superintendent of that Institution.